PATENTS
Attorney Docket No. ODS-38

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Appellant : William L. Thomas

Application No. : 09/809,922 Confirmation No.: 7120

Filed : March 16, 2001

For : SYSTEMS AND METHODS FOR PRESENTING A LOTTERY INTERFACE IN AN INTERACTIVE WAGERING APPLICATION

Art Unit : 3712

Examiner : Alex P. Rada

New York, New York 10020
January 18, 2006

Mail Stop Appeal Briefs - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

APPEAL BRIEF UNDER 37 C.F.R. § 41.37

Sir:

Appellant is filing this Appeal Brief in support of the appeal from the final rejection of claims 1-32 in the Final Office Action dated April 19, 2006. A Notice of Appeal for this case was filed on July 19, 2006.

Appellant hereby petitions for a four-month extension of time under 37 C.F.R. § 1.136(a) for filing this Appeal Brief. With the extension, this Appeal Brief is due on or before January 19, 2006.

01/22/2007 MWOLDGE1 00000021 061075 09809922
01 FC:1402 500.00 DA

BEST AVAILABLE COPY

The Director is hereby authorized to charge $2090.00 to Deposit Account No. 06-1075 (Order No. 003043-0038) in payment of the filing fee required under 37 C.F.R. § 41.20(b)(2) and the extension fee required under 37 C.F.R. § 1.17(a)(4). The Director is also hereby authorized to charge any additional fees that may be due in connection with this Appeal Brief, or credit any overpayment of the same, to Deposit Account No. 06-1075 (Order No. 003043-0038). A separate Authorization to Charge Deposit Account is enclosed for these purposes (in duplicate).

In view of the arguments and authorities set forth below, the Board should find the rejection of claims 1-32 to be in error, and the Board should reverse the rejection.

Appendices

This Brief has the following appendices:

Claims Appendix

Appendix A: Copy of claims 1-32 involved in this appeal;

Evidence Appendices

Appendix B: Copy of the Final Office Action dated April 19, 2006;

Appendix C: Copy of Schneier et al. U.S. Patent No. 6,402,614 (hereinafter "Schneier");

Appendix D: Copy of Archer U.S. Patent No. 6,277,026 (hereinafter "Archer");

Appendix E: Copy of Dickinson et al. G.B. Patent No. 2,147,773 (hereinafter "Dickinson");

Appendix F: Copy of Rittmaster U.S. Patent Publication No. 2002/0023010 (hereinafter "Rittmaster");

Appendix G: Copy of LottoBot, http://lotobot.net (hereinafter "LottoBot");

Appendix H: Copy of Luciano et al. U.S. Patent No. 6,168,521 (hereinafter "Luciano");

Appendix I: Copy of SGI Insights, Scientific Gaming International, vol. 1, issue no. 5 (January 1999)(hereinafter "SGI Insights");

Appendix J: Copy of McCollom et al. U.S. Publication No. 2002/0010623 (hereinafter "McCollom"); and

Appendix K: Copy of Small U.S. Patent No. 4,815,741 (hereinafter "Small").

Related Proceedings Appendix

None.

(i.) Real Party in Interest

Appellant advises the Board that the real party in interest in the above-identified patent application is ODS Properties, Inc., a corporation organized and existing under the laws of the State of Delaware, and having an

office and place of business at 6701 Center Drive West, Los Angeles, CA 90045, which is the assignee of this application.

(ii.) Related Appeals and Interferences

Appellant advises the Board that there are no other appeals or interferences known to appellant, his legal representative, or his assignee that will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(iii.) Status of Claims

Claims 1-32 are rejected in this application and are on appeal. Claims 33-84 have been cancelled.

(iv.) Status of Amendments

Appellant has not submitted any amendment pursuant to 37 C.F.R. § 1.116 or in reply to the April 19, 2006 Final Office Action (hereinafter "Final Office Action"), from which this appeal is being sought.

(v.) Summary of Claimed Subject Matter

Appellant's independent claims 1 and 11 are directed toward a method and a system for using an interactive wagering application to allow a user in a particular location to participate in lottery wagering using user equipment. The interactive wagering application

determines the particular location of the user and provides a listing of lotteries in which the user may participate on a visual display based on the particular location of the user. The interactive wagering application provides the user with the ability to participate in at least one of the listed lotteries using the user equipment and issues an electronic lottery ticket for the lottery. The drawing for the lottery takes place at a time subsequent to the issuance of the electronic lottery ticket.

Support in the specification for claims 1 and 11 is found at least in the locations indicated in the following table:

Claim 1	The Specification
A method for using an interactive wagering application to allow a user in a particular location to participate in lottery wagering using user equipment, comprising:	*See, e.g.*, p. 1, ll. 13-17; p. 2, ll. 17-29.
determining the particular location of the user;	*See, e.g.*, p. 19, ll. 14-22.
providing a listing of lotteries in which the user can participate on a visual display based on the particular location of the user;	*See, e.g.*, p. 35, l. 20 through p. 36, l. 6.
giving the user the ability to participate in at least one of the lotteries using the user equipment; and	*See, e.g.*, p. 2, ll. 17-22; p. 6, ll. 10-31.

issuing an electronic lottery ticket for the at least one of the lotteries, wherein a lottery drawing for the at least one of the lotteries will take place at a later time.	*See, e.g.*, p. 2, l. 17 through p. 3, l. 5; p. 38, ll. 7-19; p. 42, l. 30 through p. 43, l. 24.
Claim 11	**The Specification**
An interactive wagering system for using an interactive wagering application to allow a user in a particular location to participate in lottery wagering using user television equipment, comprising user equipment configured to:	*See, e.g.*, p. 1, ll. 13-17; p. 2, ll. 17-29.
determine the particular location of the user;	*See, e.g.*, p. 19, ll. 14-22.
provide a listing of lotteries in which the user can participate on a visual display based on the particular location of the user;	*See, e.g.*, p. 35, l. 20 through p. 36, l. 6.
give the user the ability to participate in at least one of the lotteries using the user television equipment; and	*See, e.g.*, p. 2, ll. 17-22; p. 6, ll. 10-31.
issue an electronic lottery ticket for the at least one of the lotteries, wherein a lottery drawing for the at least one of the lotteries will take place at a later time.	*See, e.g.*, p. 2, l. 17 through p. 3, l. 5; p. 38, ll. 7-19; p. 42, l. 30 through p. 43, l. 24.

Appellant's dependent claims 6 and 16 are directed toward a method and a system that records, in a multimedia format, lottery drawings associated with lotteries in which the user participated.

Support in the specification for claims 6 and 16 is found at least in the locations indicated in the following table:

Claim 6	The Specification
The method of claim 1 further comprising recording, in a multimedia format, the lottery drawings associated with the lotteries in which the user participated.	*See, e.g.*, p. 2, ll. 30-32; p. 25, l. 3 through p. 26, l. 2.
Claim 16	**The Specification**
The system of claim 11 further comprising user equipment configured to record, in a multimedia format, the lottery drawings associated with the lotteries in which the user participated.	*See, e.g.*, p. 2, ll. 30-32; p. 25, l. 3 through p. 26, l. 2.

Appellant's dependent claims 10 and 20 are directed toward a method and a system that creates a wager based on user inputs, gives the user the ability to finalize the wager at a later time, and then reminds the user to finalize the wager.

Support in the specification for claims 10 and 20 is found at least in the locations indicated in the following table:

Claim 10	The Specification
The method of claim 1 further comprising: creating a wager based on user inputs; giving the user the ability to finalize the wager at a later time; and reminding the user to	*See, e.g.*, p. 40, l. 13 through p. 42, l. 2; FIGS. 12 and 13.

finalize the wager.	
Claim 20	**The Specification**
The system of claim 11 further comprising user equipment configured to: create a wager based on user inputs; give the user the ability to finalize the wager at a later time; and remind the user to finalize the wager.	*See, e.g.*, p. 40, l. 13 through p. 42, l. 2; FIGS. 12 and 13.

Appellant's independent claims 21 and 27 are directed toward a method and a system for using an interactive wagering application to allow a user to automatically participate in a lottery using electronic user equipment. The user is given the ability to specify conditions via the user equipment, on which the interactive wagering application is at least partially implemented. The interactive wagering application automatically participates in the lottery on behalf of the user when the conditions are met. Further, the wagering application notifies the user of the user's automatic participation in the lottery.

Support in the specification for claims 21 and 27 is found at least in the locations indicated in the following table:

Claim 21	The Specification
A method for using an interactive wagering application to allow a user to participate in a lottery automatically using electronic user equipment, comprising:	*See, e.g.*, p. 2, l. 17 through p. 3, l. 23.
giving the user the ability to specify conditions via the user equipment on which the interactive wagering application is at least partially implemented;	*See, e.g.*, p. 39, l. 24 through p. 40, l. 12.
automatically participating in the lottery on behalf of the user when the conditions have been met; and	*See, e.g.*, p. 39, l. 24 through p. 40, l. 12.
notifying the user of the automatic participation in the lottery.	*See, e.g.*, p. 43, l. 10 through p. 44, l. 13; FIGS. 14A, 14B, and 15.
Claim 27	**The Specification**
A system for using an interactive wagering application to allow a user to participate in a lottery automatically comprising electronic user equipment configured to:	*See, e.g.*, p. 2, l. 17 through p. 3, l. 23.
give the user the ability to specify conditions via the user equipment on which the interactive wagering application is at least partially implemented;	*See, e.g.*, p. 39, l. 24 through p. 40, l. 12.
automatically participate in the lottery on behalf of the user when the conditions have been met; and	*See, e.g.*, p. 39, l. 24 through p. 40, l. 12.
Notify the user of the automatic participation in the lottery.	*See, e.g.*, p. 43, l. 10 through p. 44, l. 13; FIGS. 14A, 14B, and 15.

(vi.) Grounds of Rejection to be Reviewed on Appeal

The following ground of rejection is to be reviewed on this appeal:

Whether claims 1-6 and 11-16 are obvious under 35 U.S.C. § 103(a) over Schneier in view of Archer.

Whether claims 1 and 11 are obvious under 35 U.S.C. § 103(a) over Dickinson in view of Rittmaster in further view of Archer.

Whether claims 6 and 16 are obvious under 35 U.S.C. § 103(a) over Dickinson in view of Rittmaster and Archer in further view of Luciano.

Whether claims 10 and 20 are obvious under 35 U.S.C. § 103(a) over Dickinson in view of Rittmaster and Archer in further view of McCollom.

Whether claims 21-32 are obvious under 35 U.S.C. § 103(a) over Walker in view of Archer in further view of Small.

(vii.) Argument

A. Rejection of Claims 1-6 and 11-16 under 35 U.S.C. § 103(a) over Schneier in view of Archer

In the Final Office Action, the Examiner rejected claims 1-6 and 11-16 under 35 U.S.C. § 103(a) as being obvious over Schneier in view of Archer. Appellant

respectfully traverses this rejection and requests that it be overturned for at least the reasons set forth below.

Appellant's independent claims 1 and 11 are directed toward a method and a system for using an interactive wagering application to allow a user in a particular location to participate in lottery wagering using user equipment. The interactive wagering application determines the particular location of the user and provides a listing of lotteries in which the user may participate on a visual display based on the particular location of the user. The interactive wagering application provides the user with the ability to participate in at least one of the listed lotteries using the user equipment and issues an electronic lottery ticket for the lottery. The drawing for the lottery takes place at a time subsequent to the issuance of the electronic lottery ticket.

Schneier refers to an off-line lottery system which enables players to purchase instant-type lottery game outcomes from a randomized prize data stream in a central computer. After the players purchase the instant-type lottery games having pre-determined outcomes, the user may "play" the lottery games by revealing the pre-determined outcome. A GPS receiver may determine the location of the

player and may prevent the user from "playing" unless the player is in a location where such gaming is permitted.

Archer refers to a system for facilitating the purchase and sale of conventional lottery tickets online.

1. The Examiner's Rejection

The Examiner contends that Schneier refers to all of the elements of appellant's impendent claims 1 and 11, except "issuing an electronic lottery ticket for the at least one of the lotteries, wherein a lottery drawing for the at least one of the lotteries will take place at a later time." In an attempt to remedy this deficiency, the Examiner purports to combine Schneier with Archer.

2. Appellant's Response to the Rejection

The Examiner has failed to establish a *prima facie* case of obviousness

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine the reference teachings. Second, there must be a reasonable expectation of success. Finally the prior art reference (or references when combined) must teach or suggest all of the claim limitations. *See* MPEP 2143; *see*

also In re Vaeck, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

Appellant submits that the Examiner has failed to establish a *prima facie* case of obviousness and that this rejection is therefore insufficient as a matter of law. First, the Examiner has failed to point out any suitable suggestion or motivation to combine Schneier and Archer. Second, there cannot exist a suggestion or motivation to combine Schneier with Archer in the manner suggested by the Examiner at least because Schneier teaches away from such a combination.

a. The Examiner failed to present a suitable suggestion or motivation to combine Schneier and Archer

Appellant submits that the Examiner has failed to fulfill the requirement of presenting an "objective teaching . . . or . . . knowledge generally available to one of ordinary skill in the art that would lead that individual to combine the relevant teachings of the references," *In re Fine*, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). *See also In re Rouffet*, 149 F.3d 1350, 1355 (Fed. Cir. 1998) ("When a rejection depends on a combination of prior art references, there must be some teaching, suggestion, or motivation to combine the references").

The Examiner contends that it would have been obvious to a person of ordinary skill in the art to modify Schneier to include issuing an electronic lottery ticket for a lottery that will take place at a later time as referred to by Archer "to provide a system that facilitates the sale of lottery tickets without distributing bearer-type tickets and the like." Final Office Action at p. 4.

This is not an objective teaching that would lead one of ordinary skill in the art to combine these references to obtain appellant's claimed invention. Rather this is merely an alleged benefit of Archer's on-line gaming system over a traditional lottery arrangement.

Furthermore, the Examiner has failed to point to any motivation for modifying the instant-type lottery game of Schneier to provide lottery tickets for which lottery drawings take place at a later time.

The motivation that the Examiner has pointed to in Archer (*i.e.*, the elimination of bearer-type tickets) is insufficient because it is merely conclusory. Appellant submits, therefore, that the Examiner's purported motivation is a broad, conclusory statement without factual support. Broad conclusory statements, standing alone, are not sufficient to support an obviousness rejection. *See In re Freed,* 165 USPQ 570, 571-72 (CCPA 1970) (an obviousness

rejection must be based on facts, "cold hard facts"); *see also In re Kotzab*, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000) ("[b]road, conclusory statements standing alone are not 'evidence'"). The Examiner's statement that the combination "facilitates the sale of lottery tickets," without factual support, is insufficient as a matter of law. *See In re Dembiczak,* 50 USPQ2d 1614 (Fed. Cir. 1999).

Moreover, the mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. *See In re Malls*, 16 USPQ2d 1430 (Fed. Cir. 1999); *see also In re Fritch*, 23 USPQ2d 1780 (Fed. Cir. 1992) ("The mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification."). While Schneier and Archer both relate to lottery systems, and assuming, *arguendo*, that combining Schneier and Archer yields all of the features appellant's claimed invention, without a proper showing of a suggestion or motivation to combine the references, a finding of obviousness is improper.

Appellant submits that the Examiner has employed hindsight reconstruction in combining the references. With

the knowledge of appellant's novel approach for an interactive wagering application, particular features of the prior art were identified for use in rejecting appellant's claims invention. This technique has long been held invalid by the courts at creating a *prima facie* case of obviousness. *See, e.g., In re Fine* at 1600 ("One cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention.").

The Examiner has used appellant's own claims as a bridge between Schneier and Archer. In doing so, the Examiner has demonstrated mere hindsight reconstruction, the very "syndrome" that the requirement for objective evidence is designed to combat, and the rejection is therefore insufficient as a matter of law. *See In re Dembiczak* at 1617-1618.

Because the Examiner failed to point to a suggestion or motivation for modifying Schneier with the teachings of Archer, appellant submits that the Examiner has failed to make a *prima facie* case of obviousness. *See* MPEP § 2142.

b. Schneier teaches away from the features of appellant's independent claims

Not only has the Examiner failed to present a sufficient suggestion or motivation to combine Schneier

with Archer in the manner identified by the Examiner in order to show all of the elements of appellant's claimed invention, but such a suggestion or motivation cannot exist because Schneier actually teaches away from being modified to include the features of appellant's claimed invention. Prior art must be considered in its entirety, including disclosures that teach away from the claims. *See* MPEP 2141.02. If a proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. *See In re Gordon*, 221 USPQ 1125 (Fed. Cir 1984).

Schneier refers to a system for playing "instant-type lottery games." As such, the system of Schneier is not capable of supporting a lottery for which a drawing takes place at a later time. In particular, in order to play the instant games of Schneier, a user purchases tickets having pre-determined outcomes and "plays" the games by revealing the predetermined outcome associated with the purchased tickets. The advantage of such a system according to Schneier is that it permits user to play the instant-type lottery games without being "physically or electronically connected to a lottery system network." Schneier at col. 1, ll. 27-28. However, in sharp contrast,

a lottery game having an associated lottery drawing would require a connection to the lottery system network for the user to participate in the lottery (*i.e.*, in order to obtain and process the outcome of the associated lottery drawing).

Accordingly, because Schneier is solely directed toward a different type of lottery system than that recited by appellant's claims, having different modes of operations and requirements, Schneier teaches away from the method and system of appellant's claimed invention.

3. Conclusion

In view of the foregoing, appellant submits that the Board should reverse the obviousness rejection of claims 1 and 11 under 35 U.S.C. § 103(a) as being obvious over Schneier in view of Archer. Appellant further submits that the Board should reverse the obviousness rejection of claims 2-6 and 12-16 at least because claims 2-6 and 12-16 depend from independent claims 1 and 11 respectively. *See In re Fine* at 1600.

B. Rejection of Claims 1 and 11 under 35 U.S.C. § 103(a) over Dickenson in view of Rittmaster and Archer

In the Final Office Action, the Examiner rejected claims 1 and 11 under 35 U.S.C. § 103(a) as being obvious

over Dickenson in view of Rittmaster, in further view of Archer. Appellant requests that it be overturned for at least the reasons set forth below.

Dickinson refers to a lottery game terminal that provides a plurality of user selectable lottery games and is capable of operating in a multi-terminal statewide lottery game system. The game terminal of Dickinson does not determine its geographic location. Nor do the plurality of user selectable games available to a player depend on the particular location of the terminal. Dickinson's game terminal includes a printer for printing out lottery tickets.

Rittmaster refers to a communications system that includes a provider processor and a plurality of recipient processors located at geographically remote locations that are connected via a communications network. Each recipient processor is associated with a positioning system, such as a GPS, for determining location information for the remote recipient system. The geographic location of each of the recipient processors may be used by the provider processor to determine whether to provide requested information to each of the recipient processors. Used in conjunction with a lottery system, the provider processor may restrict recipient processors from participating in lottery games if

the recipient processors are located in jurisdictions that prohibit such lottery games.

1. The Examiner's Rejection

The Examiner contends that Dickinson refers to all of the elements of appellant's independent claims 1 and 11, except i) "determining the particular location of the user and providing a listing of lotteries in which the user can participate on a visual display based on the particular location of the user" and ii) "issuing an electronic lottery ticket for the at least one of the lotteries, wherein a lottery drawing for the at least one of the lotteries will take place at a later time."

In an attempt to remedy these deficiencies, the Examiner has attempted to combine Dickinson with Rittmaster and Archer.

2. Appellant's Response to the Rejection

The Examiner has failed to establish a *prima facie* case of obviousness

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine the reference teachings. Second, there must be a

reasonable expectation of success. Finally the prior art reference (or references when combined) must teach or suggest all of the claim limitations. *See* MPEP 2143; *see also In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

Appellant submits that the Examiner has failed to establish a *prima facie* case of obviousness and that this rejection is therefore insufficient as a matter of law. First, the Examiner has failed to point out any suitable suggestion or motivation to combine Dickinson, Rittmaster and Archer. Second, there cannot exist a suggestion or motivation to combine Dickinson with Rittmaster and Archer in the manner suggested by the Examiner at least because Dickinson teaches away from such a combination.

a. The Examiner failed to present a suitable suggestion or motivation to combine Dickinson, Rittmaster, and Archer

Appellant submits that the Examiner has failed to fulfill the requirement of presenting an "objective teaching . . . or . . . knowledge generally available to one of ordinary skill in the art that would lead that individual to combine the relevant teachings of the references," *In re Fine*, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988); *see also In re Rouffet*, 149 F.3d 1350, 1355 (Fed. Cir. 1998) ("When a rejection depends on a

combination of prior art references, there must be some teaching, suggestion, or motivation to combine the references").

The Examiner contends that it would have been obvious to a person of ordinary skill in the art to modify Dickinson with Rittmaster to "ensure lottery legality in certain jurisdictions." Final Office Action at p. 5. The Examiner further contends that it would have been obvious to a person of ordinary skill in the art to modify Dickinson with Archer to "facilitate the sale of lottery tickets without distributing bearer-type tickets." *Id.*

Appellant submits that the Examiner has merely listed alleged benefits of each of the references as motivation to combine instead of pointing to objective teachings that would lead one of ordinary skill in the art to combine the references to obtain appellant's claimed invention. Appellant submits, therefore, that the Examiner's purported motivation is a broad, conclusory statement without factual support. Broad conclusory statements, standing alone, are not sufficient to support an obviousness rejection. *See In re Freed,* 165 USPQ 570, 571-72 (CCPA 1970) (an obviousness rejection must be based on facts, "cold hard facts"); *see also In re Kotzab,* 55 USPQ2d 1313, 1317 (Fed. Cir. 2000) ("[b]road, conclusory

statements standing alone are not 'evidence'"). These statement without factual support, are insufficient as a matter of law. *See In re Dembiczak,* 50 USPQ2d 1614 (Fed. Cir. 1999).

Moreover, the mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. *See In re Malls,* 16 USPQ2d 1430 (Fed. Cir. 1999); *see also In re Fritch,* 23 USPQ2d 1780 (Fed. Cir. 1992) ("The mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification.") While Dickinson, Rittmaster, and Archer each relate to lottery systems, and assuming, *arguendo,* that combining Dickinson, Rittmaster, and Archer yields all of the features of appellant's claimed invention, without a proper showing of a suggestion or motivation to combine the references, a finding of obviousness is improper.

Appellant submits that the Examiner has employed hindsight reconstruction in combining the references. With the knowledge of appellant's novel approach for an interactive wagering application, particular features of the prior art were identified for use in rejecting

appellant's claims invention. This technique has long been held invalid by the courts at creating a *prima facie* case of obviousness. *See, e.g., In re Fine* at 1600 ("One cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention.").

The Examiner has used appellant's own claims as a bridge between Dickinson, Rittmaster, and Archer. In doing so, the Examiner has demonstrated mere hindsight reconstruction, the very "syndrome" that the requirement for objective evidence is designed to combat, and the rejection is therefore insufficient as a matter of law. *See In re Dembiczak* at 1617-1618.

Because the Examiner failed to point to a suggestion or motivation for modifying Dickinson with the teachings of Rittmaster and Archer, appellant submits that the Examiner has failed to make a *prima facie* case of obviousness. *See* MPEP at 2142.

b. Dickinson teaches away from the features of appellant's independent claims

Not only has the Examiner failed to present a sufficient suggestion or motivation to combine Dickinson with Rittmaster and Archer in the manner identified by the Examiner in order to show all of the elements of

appellant's claimed invention, but such a suggestion or motivation cannot exist because Dickinson actually teaches away from being modified to include the features of appellant's claimed invention. Prior art must be considered in its entirety, including disclosures that teach away from the claims. *See* MPEP 2141.02. If a proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. *See In re Gordon*, 221 USPQ 1125 (Fed. Cir 1984).

Dickinson relates to a secure lottery system that uses a specialized lottery game terminal. The lottery game terminal of Dickinson is not a portable device and is therefore not moved from location to location - it remains stationary. Thus, there is no suggestion or motivation to modify Dickinson in order to determine the location of the user and to limit the listing of games based on location of the game terminal.

Further, Dickinson relates to a secure lottery system that uses a specialized lottery game terminal having the lottery software and specialized lottery ticket printing capabilities incorporated within the terminal. *See* Dickinson at p. 6, 11. 52-58. The terminal is

specially designed, physically and logically, for its intended purpose of printing lottery tickets. This is in stark contrast to the standard insecure user equipment of Archer, which is connected to a remote lottery service provider and does not require printed tickets. Because modifying Dickinson in the manner indicated by the Examiner would render Dickinson's system unsatisfactory for its intended purpose, there is no suggestion or motivation to make the proposed modification of Dickinson to facilitate the sale of lottery tickets without distributing bearer-type tickets.

Accordingly, because Dickinson is solely directed toward a different type of lottery system than that recited by appellant's claims, having different modes of operations and requirements, Dickinson teaches away from the method and system of appellant's claimed invention.

3. Conclusion

In view of the forgoing, appellant submits that the Board should reverse the obviousness rejection of claims 1 and 11 under 35 U.S.C. § 103(a) as being obvious over Dickinson, in view of Rittmaster, and in further view of Archer. Appellant further submits that the Board should reverse the obviousness rejection of claims 2-6 and 12-16 at least because claims 2-6 and 12-16 depend from

independent claims 1 and 11 respectively. *See In re Fine* at 1600.

C. Rejection of claims 6 and 16 under 35 U.S.C. § 103(a) over Dickenson in view of Rittmaster and Archer in further view of Luciano

In the Final Office Action, the Examiner rejected dependent claims 6 and 16 in view of Dickinson, Rittmaster, and Archer as applied to claims 1 and 11 in further view of Luciano.

Appellant's dependent claims 6 and 16 are directed toward a method and a system that records, in a multimedia format, lottery drawings associated with lotteries in which the user participated.

Luciano refers to a video lottery game system using multiple player-activated video terminals that are linked to computers. Each player places a wager and selects his lottery draw choices. The system enrolls the player in a future lottery game after the player makes his choices. After the central game server generates random game selections and communicates these random game selections to the central accounting server and to the scoreboard, the central game server records the random game selections and then repeats the process. Each video terminal may then display the results of each lottery game

in such a manner as to provide the excitement of a real-time game.

The Examiner asserts that the lottery system suggested by the combination of Dickinson, Rittmaster, and Archer shows all of the features of appellant's claims except for multimedia recording of the lottery drawings associated with the lotteries in which the user participated. Regardless of this deficiency, the Examiner asserts that recording lottery drawings in a multimedia format would have been obvious to one skilled in the art in view of Luciano.

Whether taken alone or in combination, neither Dickinson nor Rittmaster nor Archer nor Luciano shows or suggests recording, in a multimedia format, the lottery drawings associated with the lotteries in which a user participated. In spite of the Examiner's contention to the contrary, Luciano makes no mention of recording lottery drawings in a multimedia format. Rather, Luciano merely "stores records for each lottery game . . . [e]ach lottery game record includes the lottery draws for the game and player enrollment for each game." Luciano at col. 5, ll. 57-60. Thus, Luciano stores the results (*i.e.*, winning numbers) of lottery drawings in a numerical format, but

does not record lottery drawings in a multimedia format as required by appellant's claims.

Therefore, whether taken alone or in combination, Dickinson, Rittmaster, Archer, and Luciano all fail to show the features of appellant's claims 6 and 16.

For at least this additional reason, appellant submits that the Board should reverse the obviousness rejection of dependent claims 6 and 16 under 35 U.S.C. § 103(a) as being obvious in view of Dickinson, Rittmaster, Archer, and Luciano.

D. Rejection of claims 10 and 20 under 35 U.S.C. § 103(a) over Dickenson in view of Rittmaster and Archer in further view of McCollom

In the Final Office Action, the Examiner rejected dependent claims 10 and 20 in view of Dickinson, Rittmaster, and Archer as applied to claims 1 and 11 in further view of McCollom.

Appellant's dependent claims 10 and 20 are directed toward a method and a system that creates a wager based on user inputs, gives the user the ability to finalize the wager at a later time, and then reminds the user to finalize the wager.

McCollom refers to a system for publishing, distributing and redeeming coupons on a network.

Additionally, McCollom refers to a "shopping list" or "wish list" containing items that a user stores for future purchase.

The Examiner asserts that the lottery system suggested by the combination of Dickinson, Rittmaster, and Archer shows all of the features of appellant's claims except for giving the user the ability to "finalize the wager at a later time and reminding the user to finalize the wager." Final Office Action at p. 9. Regardless of this deficiency, the Examiner asserts that McCollom "teaches an analogous networked system in which users are able to purchase items and coupons over a network, wherein the users are able to finalize their purchases at a later time and be reminded to finalize their purchase." *Id.*

Appellant submits that whether taken alone or in combination, Dickinson, Rittmaster, Archer, and McCollom, do not show or suggest giving the user the ability to finalize a wager at a later time and reminding the user to finalize the wager. In particular, McCollom, the reference on which the Examiner relies to show this feature, does not show or suggest this feature. Instead, McCollom merely refers to a wish list that is part of an online shopping application. The wish list of McCollom does not remind the user to complete a purchase stored in the wish list.

Further, appellant's claims 10 and 20 are directed toward an interactive wagering application, which is not an analogous system to McCollom's system for publishing, distributing and redeeming coupons. The fact that both systems relate to executing purchases using a computer is not a sufficient relationship. Appellant submits that the Examiner has failed to provide an objective motivation to combine these references.

For at least these additional reasons, appellant submits that the Board should reverse the obviousness rejection of dependent claims 10 and 20 under 35 U.S.C. § 103(a) as being obvious in view of Dickinson, Rittmaster, Archer, and McCollom.

E. Rejection of claims 21-32 under 35 U.S.C. § 103(a) over Walker in view of Archer in further view of Small

In the Final Office Action, the Examiner rejected claims 21-32 under 35 U.S.C. § 103(a) as being obvious over Walker in view of Archer in further view of Small. Appellant traverses this rejection and requests that it be overturned for at least the reasons set forth below.

Appellant's independent claims 21 and 27 are directed toward a method and a system for using an interactive wagering application to allow a user to

automatically participate in a lottery using electronic user equipment. The user is given the ability to specify conditions via the user equipment, on which the interactive wagering application is at least partially implemented. The interactive wagering application automatically participates in the lottery on behalf of the user when the conditions are met. Further, the wagering application notifies the user of the user's automatic participation in the lottery.

Walker refers to a lottery system in which a user must purchase tickets from a lottery agent. After entering necessary information (*i.e.*, lottery numbers and conditions for participating) on a slip of paper by hand, the user must present the slip to a lottery agent who must then scan the slip into his lottery terminal in order to issue and print lottery tickets. The user is not notified when the conditions have been met and the user must attempt to figure out independently when the user has been entered in the lottery.

Small refers to an automated marketing and gaming system in which a remote financial institution interface device (*i.e.*, an ATM) automatically enters users into a sweepstakes-type game. The sweepstakes-type games may include a government-associated lottery game. The user is

notified by the interface device (*i.e.*, the ATM) that he has been entered in the game. For example, in order to encourage a user to use a particular ATM, the user is provided with free entries into a sweepstakes game with each use.

1. The Examiner's Rejection

The Examiner contends that Walker refers to a conditional lottery system. However, the Examiner concedes that Walker does not show or suggest allowing a user to participate in a lottery automatically using electronic user equipment. In an attempt to remedy this deficiency, the Examiner seeks to combine Walker with the online lottery system of Archer. However, the Examiner further concedes that Walker and Archer do not show or suggest notifying the user of automatic participation in the lottery. In attempt to remedy this further deficiency, the Examiner seeks to combine Walker, Archer, and Small.

2. Appellant's Response to the Rejection

The Examiner has failed to establish a *prima facie* case of obviousness

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to

combine the reference teachings. Second, there must be a reasonable expectation of success. Finally the prior art reference (or references when combined) must teach or suggest all of the claim limitations. *See* MPEP 2143; *see also In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

Appellant submits that the Examiner has failed to establish a *prima facie* case of obviousness and that this rejection is therefore insufficient as a matter of law. First, the Examiner has failed to point out any suitable suggestion or motivation to combine Walker with Archer and Small. Second, whether taken alone or in combination Walker, Small, and Archer do not show or suggest all of the elements of appellant's claims.

a. The Examiner failed to present a suitable suggestion or motivation to combine Walker, Archer, and Small

Appellant submits that the Examiner has failed to fulfill the requirement of presenting an "objective teaching . . . or . . . knowledge generally available to one of ordinary skill in the art that would lead that individual to combine the relevant teachings of the references," *In re Fine*, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988); *see also In re Rouffet*, 149 F.3d 1350, 1355 ("When a

rejection depends on a combination of prior art references, there must be some teaching, suggestion, or motivation to combine the references").

The Examiner contends that it would have been obvious to a person of ordinary skill in the art to modify Walker to include the features of Archer and Small "in order to facilitate the sale and distribution of lottery tickets which enhances revenue and an inform [sic] that a user has been successfully entered into the lottery." Final Office Action at p. 10.

This is not an objective teaching that would lead one of ordinary skill in the art to combine these references to obtain appellant's claimed invention. Rather this is merely an alleged benefit of these features over a traditional lottery arrangement.

Instead of providing an objective teaching or motivation to combine Walker, Archer, and Small, the Examiner merely concludes that it would have been obvious these references because the sale and distribution of lottery tickets online would "enhance revenues." The fact that adding a feature would improve the system or make the system more profitable is not an objective teaching that would lead one of ordinary skill in the art to combine the references to obtain appellant's invention. Appellant

submits, therefore, that the Examiner's purported motivation is a broad, conclusory statement without factual support. Broad conclusory statements, standing alone, are not sufficient to support an obviousness rejection. *See In re Freed,* 165 USPQ 570, 571-72 (CCPA 1970) (an obviousness rejection must be based on facts, "cold hard facts"); *see also In re Kotzab,* 55 USPQ2d 1313, 1317 (Fed. Cir. 2000) ("[b]road, conclusory statements standing alone are not 'evidence'"). The Examiner's statement that the combination will "enhance revenues," without factual support, is insufficient as a matter of law. *See In re Dembiczak,* 50 USPQ2d 1614 (Fed. Cir. 1999).

Moreover, the mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. *See In re Malls,* 16 USPQ2d 1430 (Fed. Cir. 1999); *see also In re Fritch,* 23 USPQ2d 1780 (Fed. Cir. 1992) ("The mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification. "). While Walker, Archer, and Small each relate to lottery systems, and assuming, *arguendo*, that combining Walker, Archer, and Small yields all of the features appellant's claimed

invention, without a proper showing of a suggestion or motivation to combine the references, a finding of obviousness is improper.

Appellant submits that the Examiner has employed hindsight reconstruction in combining the references. With the knowledge of appellant's novel approach for an interactive wagering application, particular features of the prior art were identified for use in rejecting appellant's claims invention. This technique has long been held invalid by the courts at creating a *prima facie* case of obviousness. *See In re Fine* at 1600 ("One cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention.").

The Examiner has used appellant's own claims as a bridge between the Walker, Archer, and Small. In doing so, the Examiner has demonstrated mere hindsight reconstruction, the very "syndrome" that the requirement for objective evidence is designed to combat, and the rejection is therefore insufficient as a matter of law. *See In re Dembiczak* at 1617-1618.

Because the Examiner failed to point to a suggestion or motivation for modifying Walker with the teachings of Archer and Small, appellant submits that the

Examiner has failed to make a *prima facie* case of obviousness. *See* MPEP § 2142.

b. The cited references do not show or suggest all of the elements of appellant's claims

The Examiner has failed to present a sufficient suggestion or motivation to combine Walker with Small and Archer in the manner identified by the Examiner in order to show all of the elements of appellant's claimed invention. Moreover, appellant submits that nothing in either Walker or Archer or Small shows or suggests automatically participating in the lottery on behalf of a user when user specified conditions have been met and notifying the user of the automatic participation in the lottery.

The Examiner concedes that Walker and Archer do not show or suggest notifying the user of the automatic participation in the lottery based on user specified conditions and relied, instead, on Small. Small, however, does not overcome the deficiencies of these disclosures.

Small refers to notifying the user when he has been entered into a sweepstakes-type game by a remote institution interface device. The user requires notification because the user does not intend to play the sweepstake-type game. The sweepstakes is merely an incentive provided by the interface device to encourage use

(*e.g.*, of an ATM). While Small refers to notifying a user that he has been automatically entered into a sweepstakes drawing, Small still does not show or suggest appellant's claimed feature of "notifying the user of the automatic participation in the lottery [when user specified conditions have been met]."

Therefore, whether taken alone or in combination, Walker, Archer, and Small fail to show all of the features of appellant's independent claims 21 and 27.

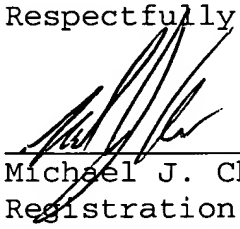
3. Conclusion

In view of the foregoing, appellant submits that the Board should reverse the obviousness rejection of claims 21 and 27 under 35 U.S.C. § 103(a) as being obvious over Walker, in view of Archer, and in further view of Small. Appellant submits that the Board should reverse the obviousness rejection of claims 22-26 and 28-32 at least because claims 22-26 and 28-32 depend from independent claims 21 and 27 respectively. *See In re Fine* at 1600.

F. Conclusion

For the reasons set forth above, appellant submits that claims 1-32 are in condition for allowance. The Examiner's rejections of these claims should be reversed.

Respectfully submitted,



Michael J. Chasan
Registration No. 54,026
Agent for Appellant
Fish & Neave IP Group
ROPES & GRAY LLP
Customer No. 1473
1251 Avenue of the Americas
New York, NY 10020-1105
Tel.: (212) 596-9000
Fax : (212) 596-9090

(viii.) Claims Appendix

CLAIMS APPENDIX A
CLAIMS 1-32 ON APPEAL

1. A method for using an interactive wagering application to allow a user in a particular location to participate in lottery wagering using user equipment, comprising:

determining the particular location of the user;

providing a listing of lotteries in which the user can participate on a visual display based on the particular location of the user;

giving the user the ability to participate in at least one of the lotteries using the user equipment; and

issuing an electronic lottery ticket for the at least one of the lotteries, wherein a lottery drawing for the at least one of the lotteries will take place at a later time.

2. The method of claim 1 further comprising notifying the user, after the lottery drawing, that results to the at least one of the lotteries in which the user participated are available.

3. The method of claim 2 wherein the notification is selected from a group consisting of a pop-up overlay, an icon, an e-mail, an instant message, a pager message, a telephone message, and any combination thereof.

4. The method of claim 1 further comprising displaying results to at least one of the lotteries in which the user participated.

5. The method of claim 4 further comprising indicating whether the user won for each of the lotteries for which results are displayed.

6. The method of claim 1 further comprising recording, in a multimedia format, the lottery drawings associated with the lotteries in which the user participated.

7. The method of claim 1 further comprising reminding the user of an upcoming lottery drawing associated with at least one of the lotteries in which the user participated.

8. The method of claim 1 further comprising giving the user the ability to generate a lottery gift certificate.

9. The method of claim 1 further comprising displaying a user interface to the user to use in creating a wager for at least one of the lotteries, wherein the user interface is customized for each one of the lotteries.

10. The method of claim 1 further comprising:

creating a wager based on user inputs;

giving the user the ability to finalize the wager at a later time; and

reminding the user to finalize the wager.

11. An interactive wagering system for using an interactive wagering application to allow a user in a particular location to participate in lottery wagering using user television equipment, comprising user equipment configured to:

determine the particular location of the user;

provide a listing of lotteries in which the user can participate on a visual display based on the particular location of the user;

give the user the ability to participate in at least one of the lotteries using the user television equipment; and

issue an electronic lottery ticket for the at least one of the lotteries, wherein a lottery drawing for the at least one of the lotteries will take place at a later time.

12. The system of claim 11 further comprising user equipment configured to notify the user, after the lottery drawing, that results to the at least one of the lotteries in which the user participated are available.

13. The system of claim 12 wherein the notification is selected from a group consisting of a pop-up overlay, an icon, an e-mail, an instant message, a pager message, a telephone message, and any combination thereof.

14. The system of claim 11 further comprising user equipment configured to display results to at least one of the lotteries in which the user participated.

15. The system of claim 14 further comprising user equipment configured to indicate whether the user won for each of the lotteries for which results are displayed.

16. The system of claim 11 further comprising user equipment configured to record, in a multimedia format, the lottery drawings associated with the lotteries in which the user participated.

17. The system of claim 11 further comprising user equipment configured to remind the user of an upcoming lottery drawing associated with at least one of the lotteries in which the user participated.

18. The system of claim 11 further comprising user equipment configured to give the user the ability to generate a lottery gift certificate.

19. The system of claim 11 further comprising user equipment configured to display a user interface to the user to use in creating a wager for at least one of the lotteries, wherein the user interface is customized for each one of the lotteries.

20. The system of claim 11 further comprising user equipment configured to:

create a wager based on user inputs;

give the user the ability to finalize the wager at a later time; and

remind the user to finalize the wager.

21. A method for using an interactive wagering application to allow a user to participate in a lottery automatically using electronic user equipment, comprising:

giving the user the ability to specify conditions via the user equipment on which the interactive wagering application is at least partially implemented;

automatically participating in the lottery on behalf of the user when the conditions have been met; and

notifying the user of the automatic participation in the lottery.

22. The method of claim 21 wherein automatically participating in the lottery comprises using a default set of lottery numbers.

23. The method of claim 22 wherein the default set of lottery numbers are user-specified.

24. The method of claim 21 wherein automatically participating in the lottery comprises using a set of randomly generated lottery numbers.

25. The method of claim 21 wherein the conditions are based on factors selected from the group consisting of a period of time from the last time the user participated in the lottery, the lottery prize, odds of winning, and any combination thereof.

26. The method of claim 21 further comprising automatically participating in the lottery on behalf of the user every time the lottery is offered.

27. A system for using an interactive wagering application to allow a user to participate in a lottery automatically comprising electronic user equipment configured to:

give the user the ability to specify conditions via the user equipment on which the interactive wagering application is at least partially implemented;

automatically participate in the lottery on behalf of the user when the conditions have been met; and

notify the user of the automatic participation in the lottery.

28. The system of claim 27 further comprising user equipment configured to use a default set of lottery numbers when automatically participating in the lottery.

29. The system of claim 28 wherein the default set of lottery numbers are user-specified.

30. The system of claim 27 further comprising user equipment configured to use a set of randomly generated lottery numbers when automatically participating in the lottery.

31. The system of claim 27 wherein the conditions are based on factors selected from the group consisting of a period of time from the last time the user participated in the lottery, the lottery prize, odds of winning, and any combination thereof.

32. The system of claim 27 further comprising user equipment configured to automatically participate in the lottery on behalf of the user every time the lottery is offered.

(ix.) Evidence Appendix

EVIDENCE APPENDIX B
COPY OF THE FINAL OFFICE ACTION DATED APRIL 19, 2006

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/809,922	03/16/2001	William L. Thomas	ODS-38	7120

1473 7590 04/19/2006

FISH & NEAVE IP GROUP
ROPES & GRAY LLP
1251 AVENUE OF THE AMERICAS FL C3
NEW YORK, NY 10020-1105

EXAMINER	
RADA, ALEX P	

ART UNIT	PAPER NUMBER
3712	

DATE MAILED: 04/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/809,922	THOMAS, WILLIAM L.	
	Examiner	Art Unit	
	Alex P. Rada	3712	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *26 January 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-32* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-32* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

In response to the amendment filed January 26, 2006 in which the applicant cancels claims 33-84, amends claims 1-2, 4, 11-12, 14, 21, and 27, and claims 1-32 are pending in this office application.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-6 and 11-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schneier et al. (U.S. 6,402,614) in view of Archer (US 6,277,026).

3. Schneier et al discloses regarding claims 1 and 11, Schneier et al disclose determining the particular location of the user (col. 18, lines 1-7 and col. 18, line 55 to col. 19, line 25 and Figure 5 along with the related description thereof, wherein the HTV 20 includes GPS receiver 111 to communicate temporal and positional information), providing a listing of lotteries in which the user can participate on a visual display based on the particular location of the user (col. 20, lines 27-34 and Figure 5 along with the related description thereof, wherein the CMC 12 enables/disables certain lottery games based on the temporal and positional information communicated by the GPS receiver 111 of HTV 20), giving the user the ability to participate in at least one of the lotteries using the user equipment (col. 16, lines 22-37 and col. 20, lines 3-15, wherein the HTV 20 includes a touch

screen display 84 enabling a user to participate in certain lottery games enabled by the CMC 12 based on the temporal and positional information communicated by the GPS receiver 111 of HTV 20) as recited in claims 1 and 11.

Regarding claims 2 and 12, Schneier et al. disclose that the user equipment is configured to notify the user that results to at least one of the lotteries in which the user participated are available (col. 19, lines 54-64 and Figure 13 along with the related description thereof).

Regarding claims 3 and 13, Schneier et al. disclose that the notification is an instant message, a pager message or a telephone message (col. 10, lines 36-46, wherein a telephone network or an interactive communications network is used to facilitate game play in which the user is notified of lottery results, e.g., see col. 19, lines 54-64 and Figure 13 along with the related description thereof).

Regarding claims 4 and 14, Schneier et al. disclose that the user equipment is configured to display the results to at least one of the lotteries in which the user participated (col. 19, lines 54-64 and col. 20, lines 32-34, wherein display 84 of HTV 20 displays lottery results).

Regarding claims 5 and 15, Schneier et al. disclose that the user equipment is configured to indicate whether the user won for each of the lotteries for which results are displayed (col. 19, lines 54-64 and col. 20, lines 32-34, wherein display 84 of HTV 20 displays lottery results).

Regarding claims 6 and 16, Schneier et al. disclose that the user equipment is configured to record, in a multimedia format, the lottery drawings associated with the lotteries in which the user participated (col. 20, lines 40-56, wherein the messages containing lottery game outcomes, i.e., lottery drawings, contain text or graphics and can be orally communicated)

Schneier et al does not expressly disclose regarding claims 1 and 11, issuing an electronic lottery ticket for the at least one of the lotteries, wherein a lottery drawing for the at least one of the lotteries will take place at a later time.

Archer teaches regarding claims 1 and 11, issuing an electronic lottery ticket for the at least one of the lotteries, wherein a lottery drawing for the at least one of the lotteries will take place at a later time (Figures 4A-4D and 5A along with the related description thereof). By issuing lottery tickets for lottery drawings for a later time, one of ordinary skill in the art would provide a system that facilitates the sale of lottery tickets without distributing bearer-type tickets and the like.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Schneier et al to include issuing an electronic lottery ticket for the at least one of the lotteries, wherein a lottery drawing for the at least one of the lotteries will take place at a later time as taught by Archer to provide a system that facilitates the sale of lottery tickets without distributing bearer-type tickets and the like.

4. Claims 1 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dickinson et al. (GB 2,147,773) and in view of Rittmaster (U.S. 2002/0023010) and Archer (US 6,277,026).

5. Dickinson et al discloses regarding claims 1 and 11, providing a listing of lotteries in which the user can participate on a visual display (Figures 1, 6-9B along with the related description thereof) and giving the user the ability to participate in at least one of the lotteries using the user equipment (Figures 1, 6-9B along with the related description thereof).

Dickinson et al. does not expressly disclose regarding claims 1 and 11, determining the particular location of the user and providing a listing of lotteries in which the user can participate on a visual display based on the particular location of the user and issuing an electronic lottery ticket for the at least one of the lotteries, wherein a lottery drawing for the at least one of the lotteries will take place at a later time and issuing an electronic lottery ticket for the at least one of the lotteries, wherein a lottery drawing for the at least one of the lotteries will take place at a later time.

Rittmaster et al. teaches regarding claims 1 and 11, limiting lotteries to geographic locations where such lotteries are legal (paragraphs [0006] and [0039]). Rittmaster et al. teach determining the particular location of the user (Figure 2 along with the related description thereof) and providing a listing of lotteries in which the user can participate on a visual display based on the particular location of the user (Figure 3 along with the related description thereof, wherein geographic information is used to allow or deny access to a product or service (i.e., the lottery listing of Dickinson). Rittmaster et al. teach that limiting lottery availability based on geographic information determined from players helps to ensure lottery legality in certain jurisdictions (paragraph [0006]).

Archer teaches the regarding claims 1 and 11, issuing an electronic lottery ticket for the at least one of the lotteries, wherein a lottery drawing for the at least one of the lotteries will take place at a later time (Figures 4A-4D and 5A along with the related description thereof). By issuing lottery tickets for lottery drawings for a later time, one of ordinary skill in the art would provide a system that facilitates the sale of lottery tickets without distributing bearer-type tickets and the like.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Dickinson et al to include limit lottery availability based on geographic information determined from players and issuing electronic tickets for lotteries taking place at a later time as taught by Rittmaster et al and Archer to ensure lottery legality in certain jurisdictions as desirably and a system that facilitates the sale of lottery tickets without distributing bearer-type tickets and the like.

6. Claims 2-5, 7, 9, 12-15, 17 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dickinson et al. in view of Rittmaster et al. and Archer, as applied to claims 1 and 11 above, and further in view of LottoBot.

The combination of Dickinson et al. and Rittmaster et al. and Archer teaches a method and system as described above with respect to claims 1 and 11, respectively. However, the combination of Dickinson et al. and Rittmaster et al. and Archer does not explicitly teach various lottery functions recited in dependent claims 2-5, 7, 9, 12-15, 17 and 19. In a related lottery application, LottoBot teaches an analogous lottery system allowing users to access lottery data and play lottery games over the Internet through user equipment (pages 1 and 20-21). LottoBot further teaches that lottery results and winning numbers can be communicated to players as a convenience to the player (pages 20-21), which enables player's to check lottery results and winning numbers from their personal computers. It would have been obvious for one skilled in the art at the time of the invention to incorporate the notification of lottery results and winning numbers of LottoBot into the combination of Dickinson et al. and Rittmaster et al. and Archer in order to increase player convenience by allowing players to check lottery results and winning numbers from their personal computers as desirably taught by LottoBot on pages 20-21.

Regarding claims 2 and 12, LottoBot teaches that users, after the lottery drawing are notified that their lottery results are available through e-mail or pager message (pages 1 and 5).

Regarding claims 3 and 13, LottoBot teaches that users are notified that their lottery results are available through pager message (page 1).

Regarding claims 4 and 14, LottoBot teaches displaying the results to at least one of the lotteries in which the user participated (page 1).

Regarding claims 5 and 15, LottoBot teaches indicating whether the user won for each of the lotteries in which the user participated (page 1).

Regarding claims 7 and 17, LottoBot teaches reminding a user of an upcoming lottery drawing, through jackpot alerts, with at least one of the lotteries in which the user participated (page 1).

Regarding claims 9 and 19, LottoBot teaches displaying a user interface to the user for use in creating a lottery wager, wherein the user interface is customized for each lottery (page 4).

7. Claims 6 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dickinson et al. in view of Rittmaster et al. and Archer, as applied to claims 1 and 11 above, and further in view of Luciano et al. (U.S. Patent No. 6,168,521).

The combination of Dickinson et al. and Rittmaster et al. and Archer teaches a method and system as described above with respect to claims 1 and 11, respectively. In particular, the combination of Dickinson et al. and Rittmaster et al. and Archer teaches lottery game availability based on geographic location, wherein users can play available lottery games. However, the combination of Dickinson et al. and Rittmaster et al. does not explicitly teach recording, in a multimedia format, the lottery drawings associated with the lotteries in which the user participated. In a related lottery application, Luciano et al. teach multiple player activated video terminals linked to computers (abstract). Each player places a wager and selects a particular lottery draw choices. The system enrolls the player in a future lottery game based on the choices. (Abstract). After drawing winning lottery numbers, the system displays the result of the selected game displayed at the player's terminal in a multimedia format (see Figure 9 along with the related description thereof), such that the player can activate a stored replay of the draw (Figure 6 along with the related description thereof). Luciano et al. teach that the video lottery system provides more excitement and entertainment than traditional lottery systems (col. 1, lines 22-27). It would have been obvious for one skilled in the art at the time of the invention to incorporate the recordation of lottery results

in a multimedia format presented to players of the lottery as taught by Luciano et al. into the lottery method and system as taught by the combination of Dickinson et al., Rittmaster and Archer in order to increase player excitement and entertainment as desirably taught by Luciano et al. in col. 1, lines 22-27.

8. Claims 8 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dickinson et al. in view of Rittmaster et al. and Archer, as applied to claims 1 and 11 above, and further in view of SGI Insights, Scientific Gaming International, vol. 1, issue no. 5 (hereafter "SGI Insights").

The combination of Dickinson et al. and Rittmaster et al. and Archer teaches a method and system as described above with respect to claims 1 and 11, respectively. In particular, the combination of Dickinson et al. and Rittmaster et al. and Archer teaches lottery game availability based on geographic location, wherein users can play available lottery games. However, the combination of Dickinson et al. and Rittmaster et al. does not explicitly teach generating lottery gift certificates. In a related lottery application, SGI Insights teaches the generation of lottery gift certificates for play in a future lottery (page 4). SGI Insights teaches that lottery gift certificates increase player appeal as recipients can use the gift certificates at any time, e.g., when the jackpot gets bigger (page 4). It would have been obvious for one skilled in the art at the time of the invention to incorporate the generation of lottery gift certificates as taught by SGI Insights into the lottery method and system as taught by the combination of Dickinson et al., Rittmaster and Archer in order to increase player appeal to the lottery games provided thereby as desirably taught by SGI Insights on page 4.

9. Claims 10 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dickinson et al. in view of Rittmaster et al. and Archer, as applied to claims 1 and 11 above, and further in view of McCollom et al. (U.S. Patent Application Publication 2002/001623).

The combination of Dickinson et al. and Rittmaster et al. and Archer teaches a method and system as described above with respect to claims 1 and 11, respectively. In particular, the combination of Dickinson et al. and Rittmaster et al. and Archer teaches lottery game availability based on geographic location, wherein users can create a wager based on user inputs to play available lottery games (Figure 1 of Dickinson et al. along with the related description thereof). However, the combination of Dickinson et al. and Rittmaster et al. and Archer does not explicitly teach giving the user the ability to finalize the wager at a later time and reminding the user to finalize the wager, as recited in claims 10 and 20. It is notoriously well known to offer products and services over a network and to allow the purchaser of such products and services to finalize a purchase at a later time and/or be reminded to finalize the purchase. McCollom et al. teach an analogous networked system in which users are able to purchase items and coupons over a network, wherein the users are able to finalize their purchase at a later time and be reminded to finalize their purchase (Figures 13, 14 and 17 along with the related description thereof, wherein purchases are placed in a "shopping basket" or "wish list" for later purchase). The system display provides an indication reminding the purchaser that the purchase is not finalized (Figures 21 and 22 along with the related description thereof). McCollom et al. teach that finalizing purchases and reminding users of the same improves the system by allowing users to browse, assemble and store selections until electing to make a purchase (paragraphs [0132] to [0137]). It would have been obvious for one skilled in the art at the time of the invention to incorporate the ability for users or purchases to finalize a purchase and be reminded of the same as taught by McCollom et al. into the lottery method and system as taught by the combination of Dickinson et al., Rittmaster and Archer in order to browse, assemble and store lottery selections until electing to make a purchase as desirably taught by McCollom et al. in paragraphs [0132] to [0137].

10. Claims 21-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Walker et al. (U.S. Patent No. 6,325,716) in view of Archer (U.S. Patent No. 6,277,026) and Small (U.S. Patent No. 4,815,741).

Walker teaches a method as recited in claims 21 and 27. The disclosed method comprises giving the user the ability to set conditions via user equipment on which an interactive wagering application is partially implemented and automatically participating in the lottery on the behalf of the user when the conditions have been met See col. 2:36-3:35. However, Walker employs paper tickets and does not explicitly teach electronic user equipment. Archer teaches an analogous system for selling lottery tickets online via electronic user equipment. See Figs. 1, 4A along with the related description thereof and col. 5:10-15. Archer teaches that the electronic user equipment facilitate the sale and distribution of lottery tickets online, which enhances revenues (col. 1:36-67). Walker et al in view of Archer do not explicitly disclose notifying the user of the automatic participated in the lottery. However, Small teaches an analogous system for notifying the user of the automatic participation in the lottery (summary). It would have been obvious for one skilled in the art at the time of the invention to incorporate the electronic user equipment and notifying the user of the automatic participated in the lottery as taught by Archer and Small into the interactive wagering application of Walker et al. in order to facilitate the sale and distribution of lottery tickets which enhances revenues and an inform that a user has been successfully entered in the lottery as desirably taught by Archer in col. 1:36-67 and Small (summary).

Regarding claims 22 and 28, Walker teaches automatically participating in the lottery comprises using a default set of lottery numbers (col. 3:1-8, col. 5:1-19).

Regarding claims 23 and 29, Walker teaches default sets of lottery numbers are user-specified (col. 3:1-8, col. 5:1-19).

Regarding claims 24 and 30, Walker teaches automatically participating in the lottery comprises using a set of randomly generated lottery numbers (col. 3:1-8, col. 5:1-19).

Regarding claims 25 and 31, Walker teaches conditions based on factors selected from the group consisting of a period of time from the last time the user participated, the lottery prize, the odds of winning and any combination thereof (col. 2:54-3:1 and col. 4:11-27). In regard to the odds of winning, the Walker teaches enrolling a ticket based on a minimum payout, which determines the ticket's expected payout (i.e. odds of winning a particular payout).

Regarding claims 26 and 32, Walker teaches automatically participating in the lottery on behalf of the user every time the lottery is offered (col. 1:55-64 and col. 2:54-64).

Response to Arguments

11. Applicant's arguments with respect to claims 1-32 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be

calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alex P. Rada whose telephone number is 571-272-4452. The examiner can normally be reached on Monday - Friday, 08:00-16:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Xuan Thai can be reached on 571-272-7147. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

APR

XUAN M. THAI
SUPERVISORY PATENT EXAMINER
TC3700

EVIDENCE APPENDIX C

COPY OF SCHNEIER ET AL. U.S. PATENT NO. 6,402,614

EVIDENCE APPENDIX D

COPY OF ARCHER U.S. PATENT NO. 6,277,026

EVIDENCE APPENDIX E

COPY OF DICKINSON ET AL. G.B. PATENT NO. 2,147,773

(12) UK Patent Application (19) GB (11) 2 147 773 A

(43) Application published 15 May 1985

(21) Application No 8423030

(22) Date of filing 12 Sep 1984

(30) Priority data

(31) 532489 (32) 14 Sep 1983 (33) US

(51) INT CL⁴
A63F 9/22 G06F 3/153 G06K 11/06

(52) Domestic classification
H4T 4R BRA
G4H 13D 14A 14B 14D 1A TE

(56) Documents cited
None

(58) Field of search
H4T

(71) Applicant
IGT (USA-Nevada),
520 South Rock Boulevard, Reno, Nevada, United States of America

(72) Inventors
Peter D. Dickinson,
Logan L. Pease

(74) Agent and/or Address for Service
M'Caw & Co.,
41-51 Royal Exchange, Cross Street, Manchester M2 7BD

(54) **Lottery game terminal**

(57) A lottery game terminal (10) providing a plurality of user selected lottery games is capable of operating in a multiterminal statewide lottery game system. Choice of game and game play is controlled by player manipulation of a light pen (13) to operate any of several soft switches displayed on a game terminal monitor (20). Game play at any time is defined by a plurality of fixed game states. As game play progresses, the game architecture allows the game to move from state to state. Accordingly, a high measure of security is provided by a predictable flow of game control. The game may be accompanied by audible tones, and a meter may be provided for storing an audit transation. When a winner is declared, a game payout schedule may be displayed.

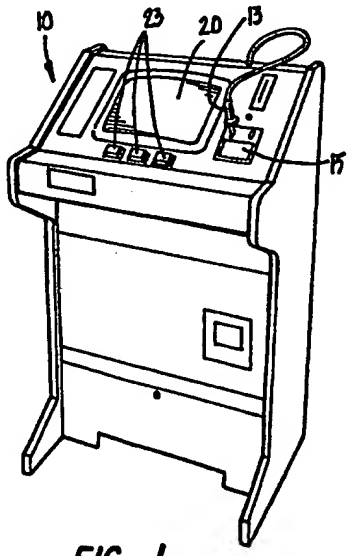


FIG_1.

GB 2 147 773 A

The drawing(s) originally filed was (were) informal and the print here reproduced is taken from a later filed formal copy.

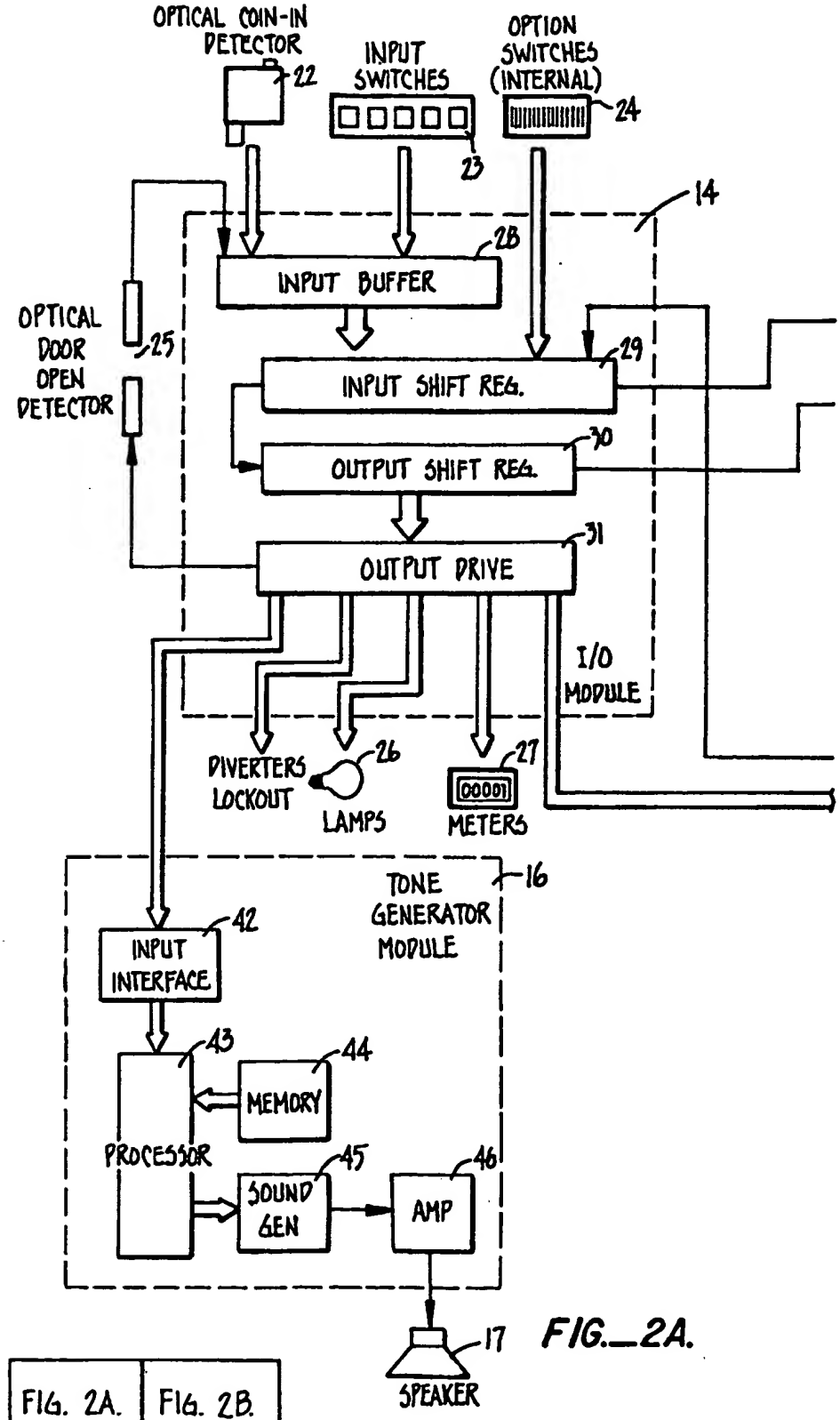


FIG. 2A.

FIG. 2A.	FIG. 2B.

FIG. 2.

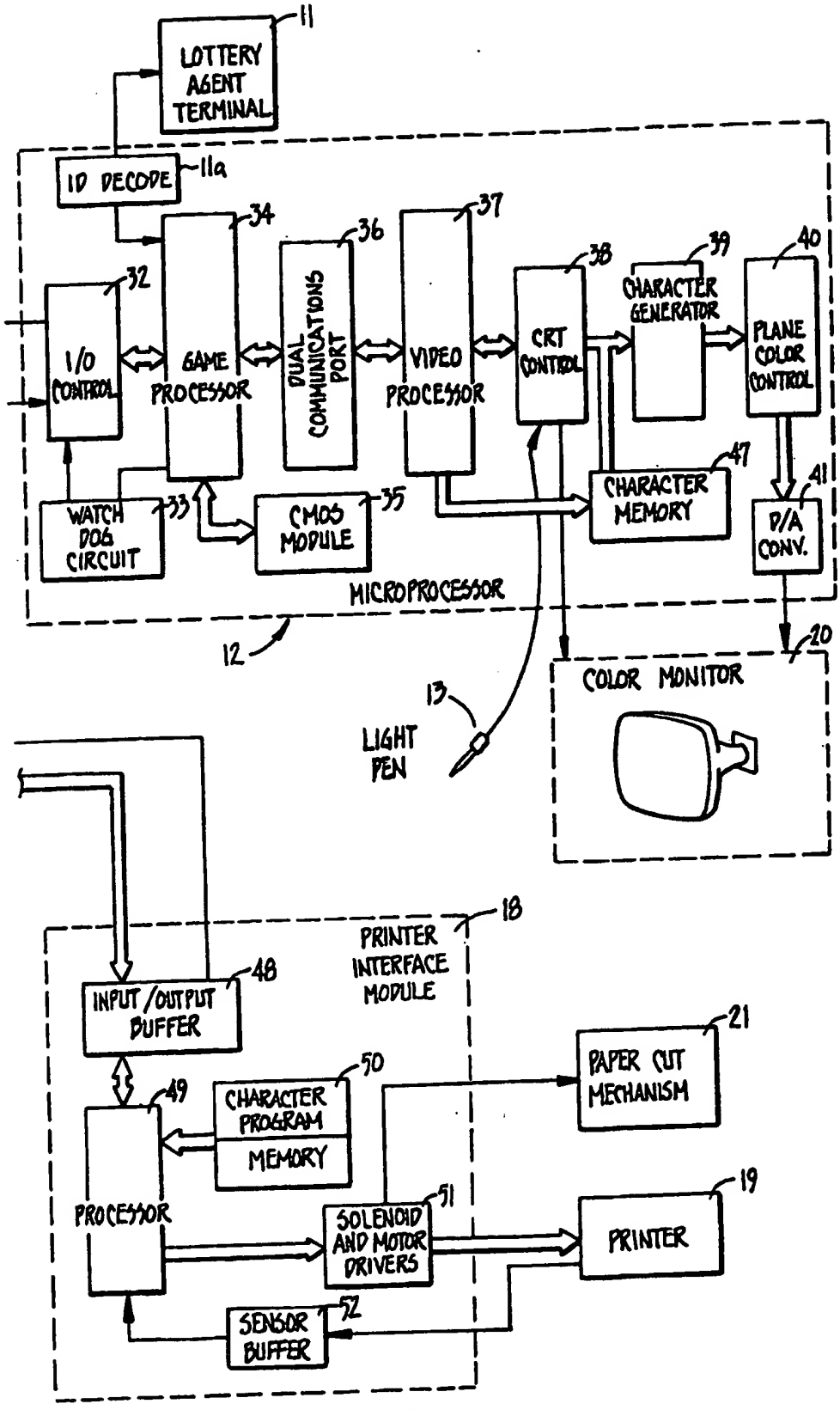

LOTTERY AGENT TERMINAL
11
ID DECODE
11a
I/O CONTROL
32
GAME PROCESSOR
34
DUAL COMMUNICATIONS PORT
36
VIDEO PROCESSOR
37
CRT CONTROL
38
CHARACTER GENERATOR
39
PLANE COLOR CONTROL
40
WATCH DOG CIRCUIT
33
CMOS MODULE
35
CHARACTER MEMORY
47
D/A CONV.
41
MICROPROCESSOR
12
COLOR MONITOR
20
LIGHT PEN
13
PRINTER INTERFACE MODULE
18
INPUT/OUTPUT BUFFER
48
PROCESSOR
49
CHARACTER PROGRAM MEMORY
50
PAPER CUT MECHANISM
21
SOLENOID AND MOTOR DRIVERS
51
PRINTER
19
SENSOR BUFFER
52

FIG_2B.

FIG._3A.	FIG._3B.	FIG._3C.	FIG._3D.
FIG._3E.	FIG._3F.	FIG._3G	FIG._3H.

FIG._3.

FIG._3A.

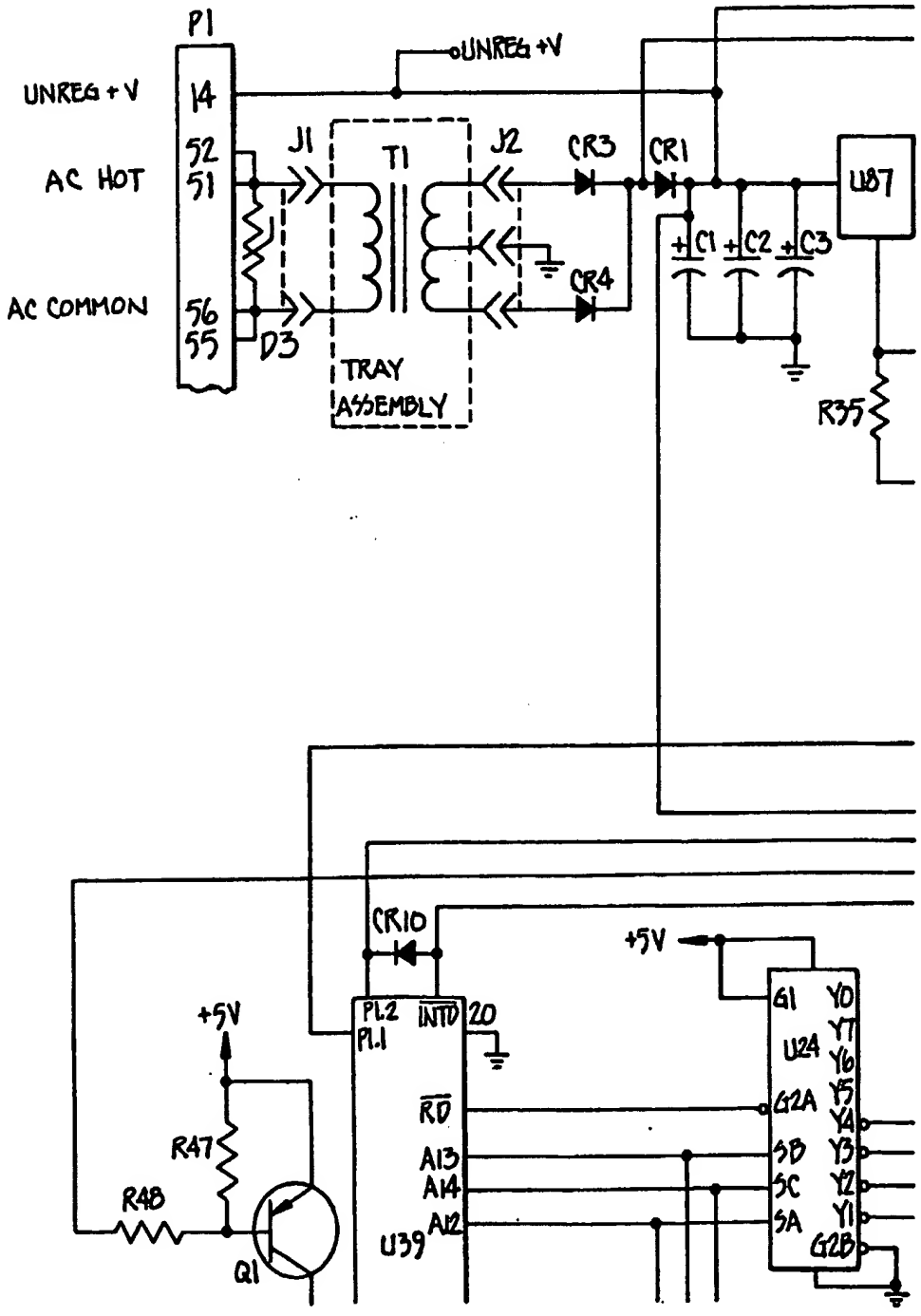


FIG._3B.

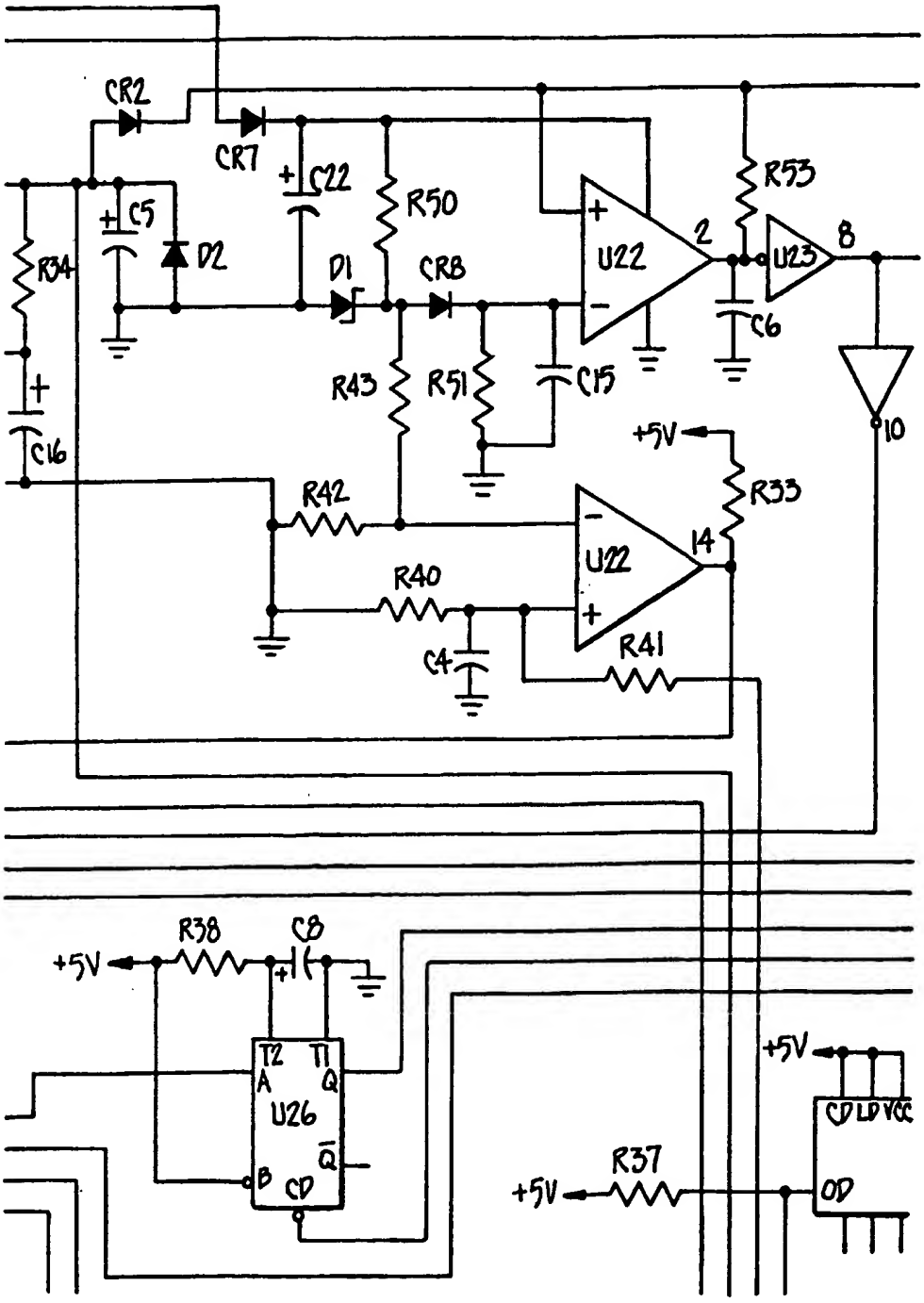

CR2
CR7
C22
R50
C5
D2
D1
CR8
U22
2
R53
U23
8
C6
R34
C16
R43
R51
C15
10
+5V
R33
R42
U22
14
R40
C4
R41
R38
C8
+5V
T2
T1
A
Q
U26
B
CD
Q
+5V
CD LD VCC
+5V
R37
OD

FIG._3C.

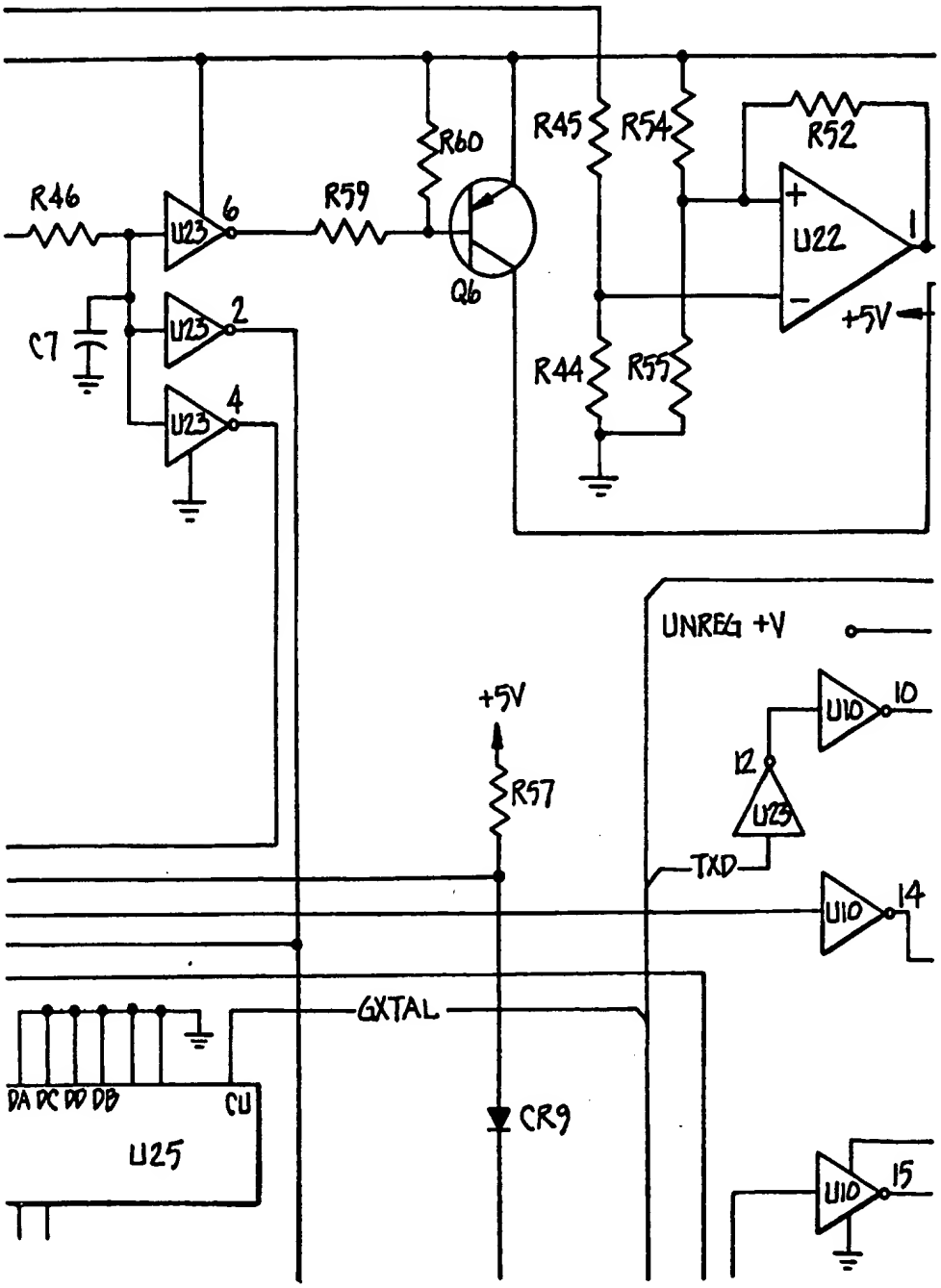
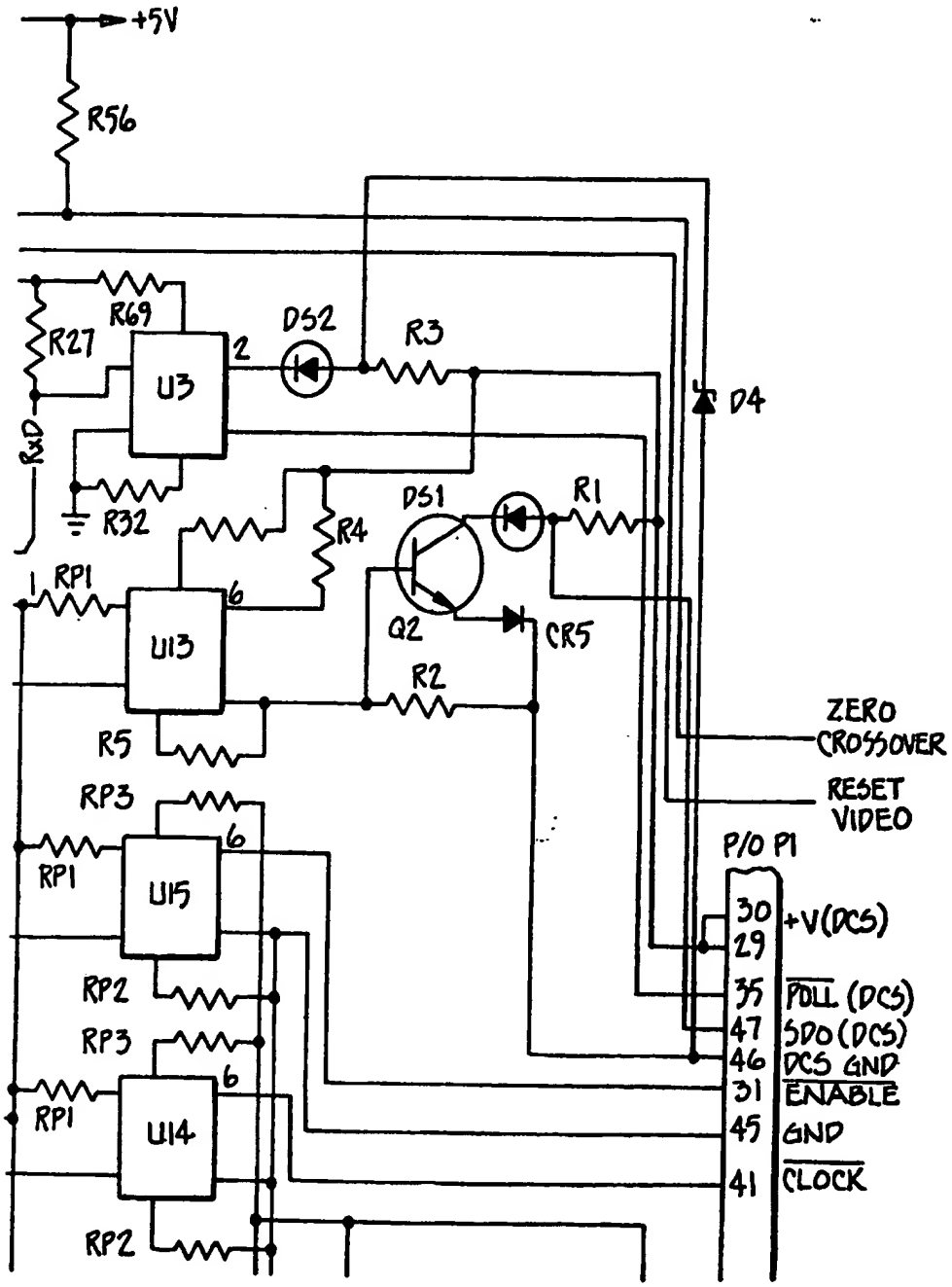

R46
U23
6
R59
R60
Q6
R45
R54
R52
U22
1
+5V
C7
2
4
R44
R55
UNREG +V
+5V
R57
U10
10
12
U23
TXD
14
GXTAL
DA DC DD DB
CU
U25
CR9
15

FIG._3D.


+5V
R56
R69
R27
U3
2
DS2
R3
D4
RxD
R32
R4
DS1
R1
RP1
1
6
U13
Q2
CR5
R2
R5
ZERO CROSSOVER
RESET VIDEO
RP3
RP1
6
U15
P/O P1
30
29
+V(DCS)
RP2
35
PDLL (DCS)
RP3
47
SDO (DCS)
46
DCS GND
RP1
6
U14
31
ENABLE
45
GND
41
CLOCK
RP2

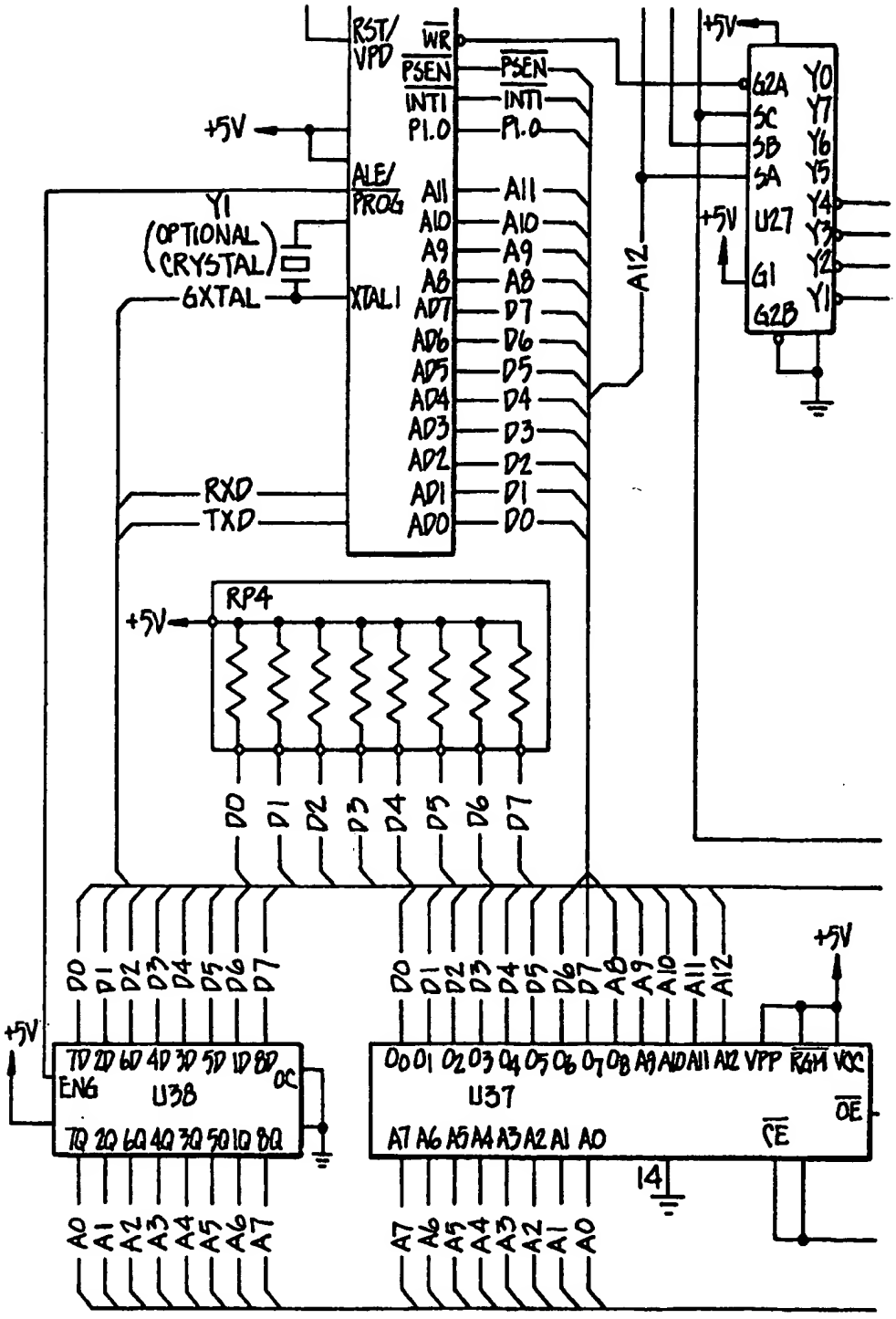

RST/VPD
WR
PSEN
INT1
P1.0
+5V
ALE/PROG
Y1
(OPTIONAL CRYSTAL)
6XTAL
XTAL1
A11
A10
A9
A8
AD7
AD6
AD5
AD4
AD3
AD2
AD1
AD0
D7
D6
D5
D4
D3
D2
D1
D0
RXD
TXD
A12
G2A
5C
5B
5A
G1
G2B
Y0
Y7
Y6
Y5
Y4
Y3
Y2
Y1
U27
RP4
U38
ENG
U37
VPP
VCC
OE
CE
14

FIG._3E.

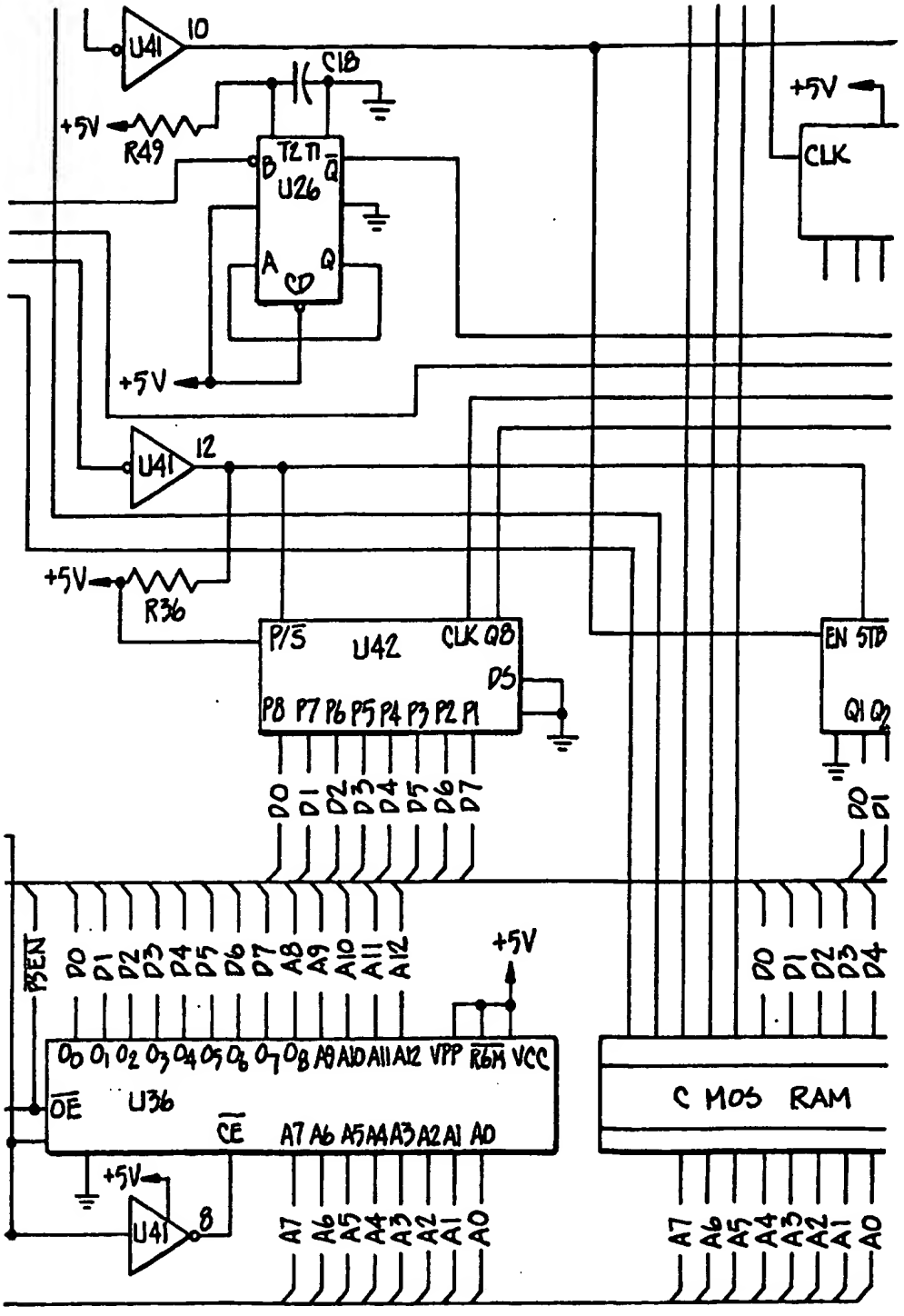

U41
10
C18
+5V
R49
T2 T1
B
Q
U26
A
CD
Q
+5V
CLK
+5V
U41
12
+5V
R36
P/S
U42
CLK Q8
D5
P8 P7 P6 P5 P4 P3 P2 P1
EN STD
Q1 Q2
D0 D1 D2 D3 D4 D5 D6 D7
D0 D1
PSEN
D0 D1 D2 D3 D4 D5 D6 D7 A8 A9 A10 A11 A12
+5V
D0 D1 D2 D3 D4
O0 O1 O2 O3 O4 O5 O6 O7 O8 A9 A10 A11 A12 VPP RDM VCC
OE
U36
CE
A7 A6 A5 A4 A3 A2 A1 A0
C MOS RAM
+5V
U41
8
A7 A6 A5 A4 A3 A2 A1 A0
A7 A6 A5 A4 A3 A2 A1 A0

FIG. 3F.

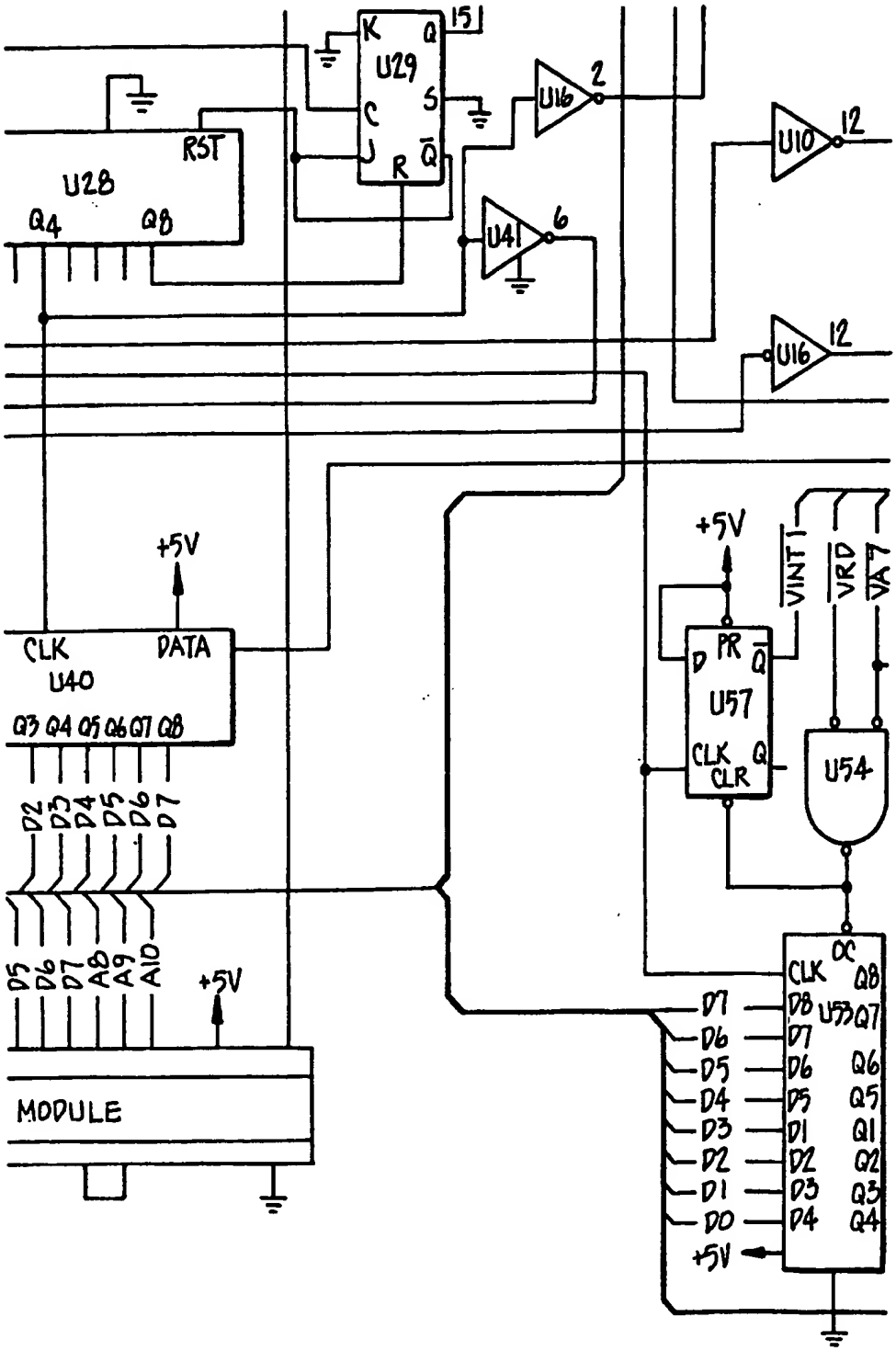

U29
K
Q
C
S
J
R
Q̄
15
RST
U28
Q4
Q8
U16
2
U41
6
U10
12
U16
12
+5V
CLK
DATA
U40
Q3 Q4 Q5 Q6 Q7 Q8
D2 D3 D4 D5 D6 D7
D5 D6 D7 A8 A9 A10
+5V
MODULE
+5V
VINT
VRD
VA7
D
PR
Q̄
U57
CLK
CLR
Q
U54
OC
CLK
D7
D6
D5
D4
D3
D2
D1
D0
+5V
D8
D7
D6
D5
D1
D2
D3
D4
U53
Q8
Q7
Q6
Q5
Q1
Q2
Q3
Q4

FIG_3G.

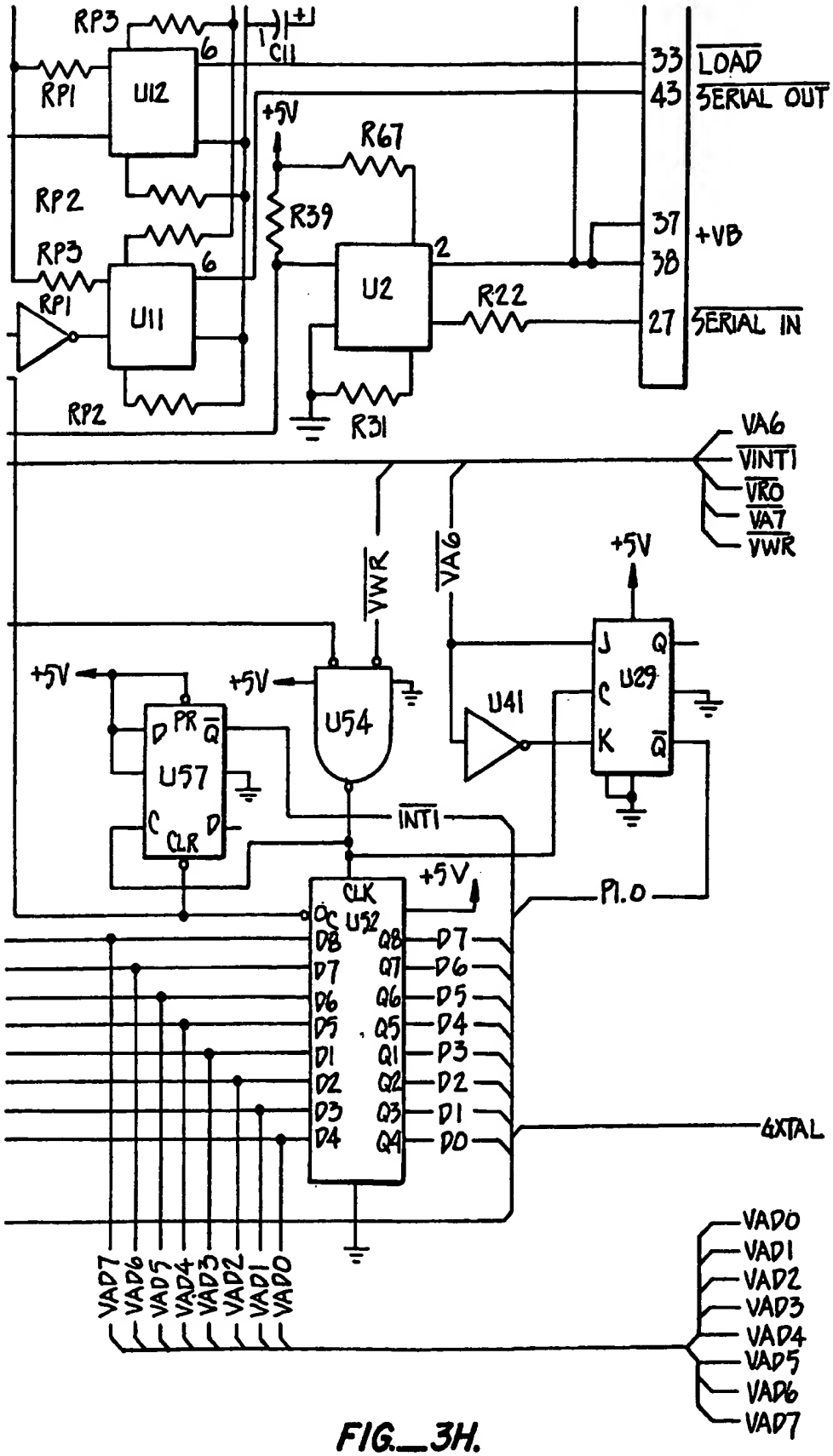

RP3
RP1
RP2
RP3
RP1
RP2
U12
U11
C11
+5V
R67
R39
U2
R22
R31
33 LOAD
43 SERIAL OUT
37 +VB
38
27 SERIAL IN
VA6
VINTI
VRO
VA7
VWR
VWR
VA6
+5V
U29
U41
U54
U57
INTI
P1.0
U52
4XTAL
VAD7
VAD6
VAD5
VAD4
VAD3
VAD2
VAD1
VAD0

FIG._3H.

FIG. 4A.	FIG. 4B.
FIG. 4C.	FIG. 4D.
FIG. 4E.	FIG. 4F.

FIG._4.

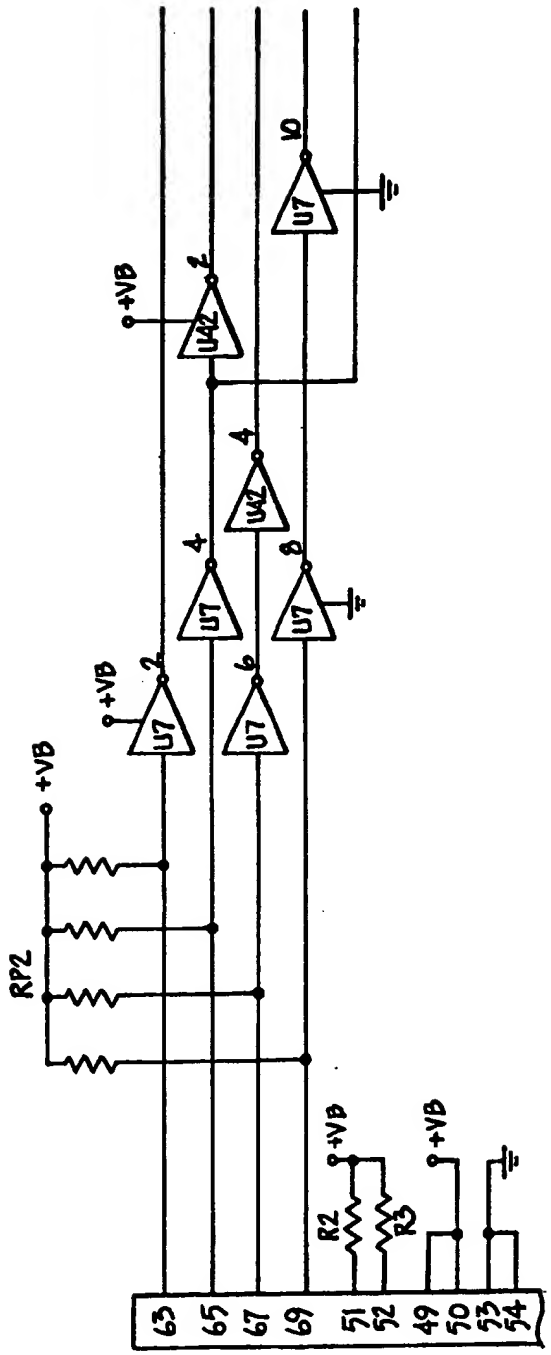


FIG._4A.

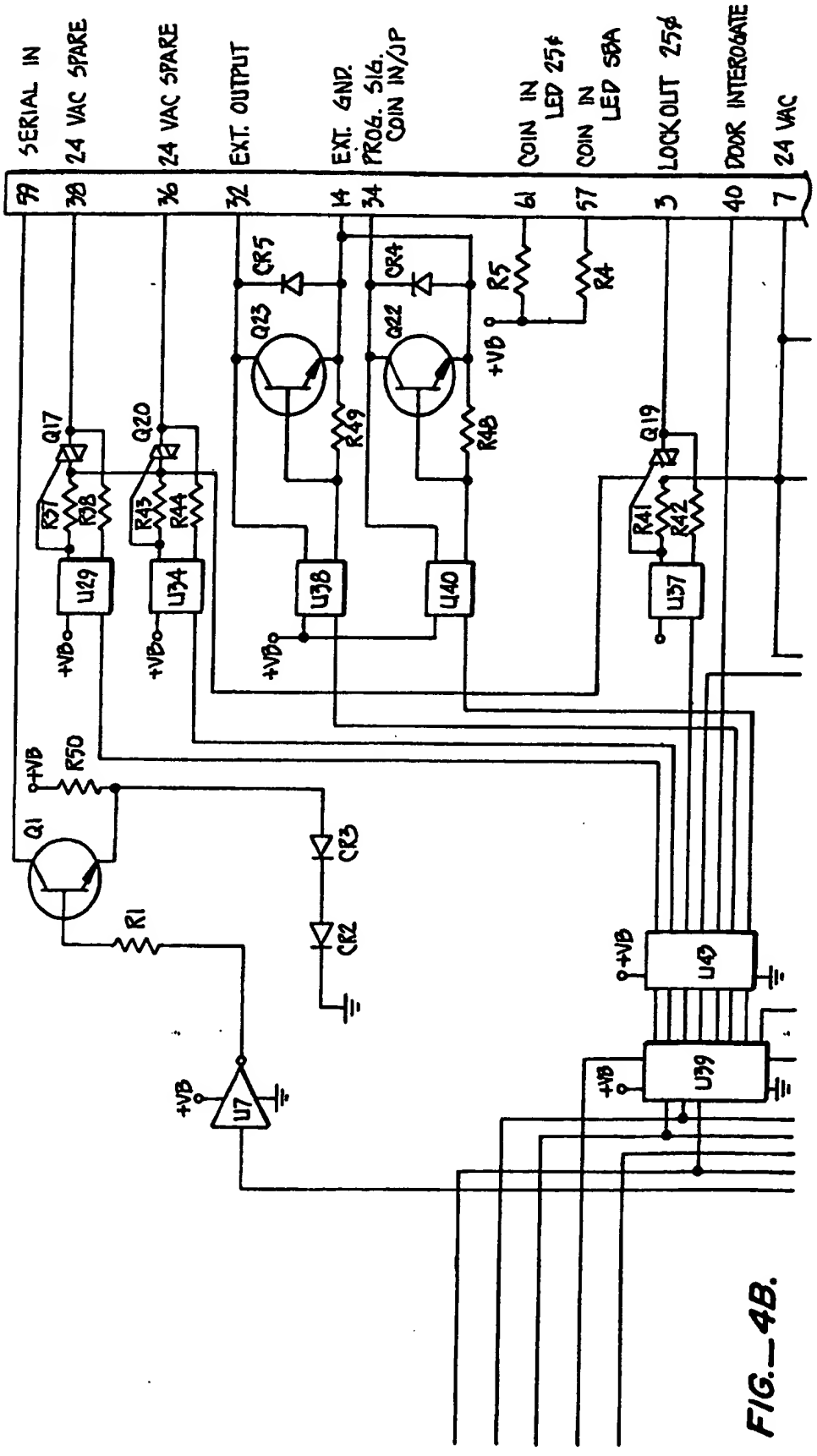

SERIAL IN
24 VAC SPARE
24 VAC SPARE
EXT. OUTPUT
EXT. GND.
PROG. SIG. COIN IN/JP
COIN IN LED 25¢
COIN IN LED $5A
LOCKOUT 25¢
DOOR INTERROGATE
24 VAC
99
30
36
32
14
34
61
57
3
40
7
CR5
CR4
R5
R4
Q23
Q22
+VB
Q17
Q20
Q19
R49
R48
R37
R38
R43
R44
R41
R42
U29
U34
U38
U40
U37
R50
Q1
CR3
CR2
R1
U7
U49
U39

FIG._4B.

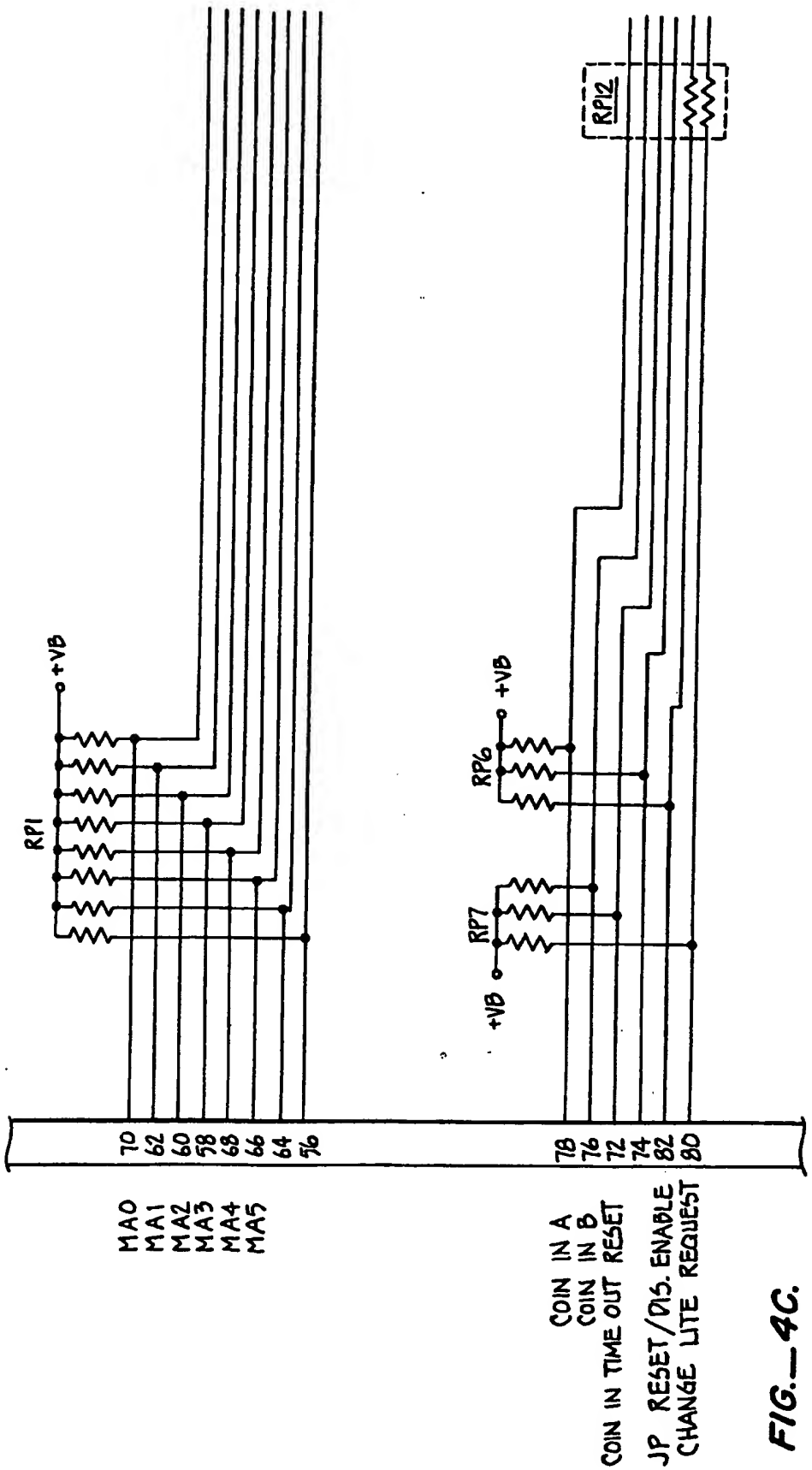

RP1
+VB
RP6
+VB
RP7
+VB
RP12
70
62
60
58
68
66
64
56
78
76
72
74
82
80
MA0
MA1
MA2
MA3
MA4
MA5
COIN IN A
COIN IN B
COIN IN TIME OUT RESET
JP RESET/DIS. ENABLE
CHANGE LITE REQUEST

FIG._4C.

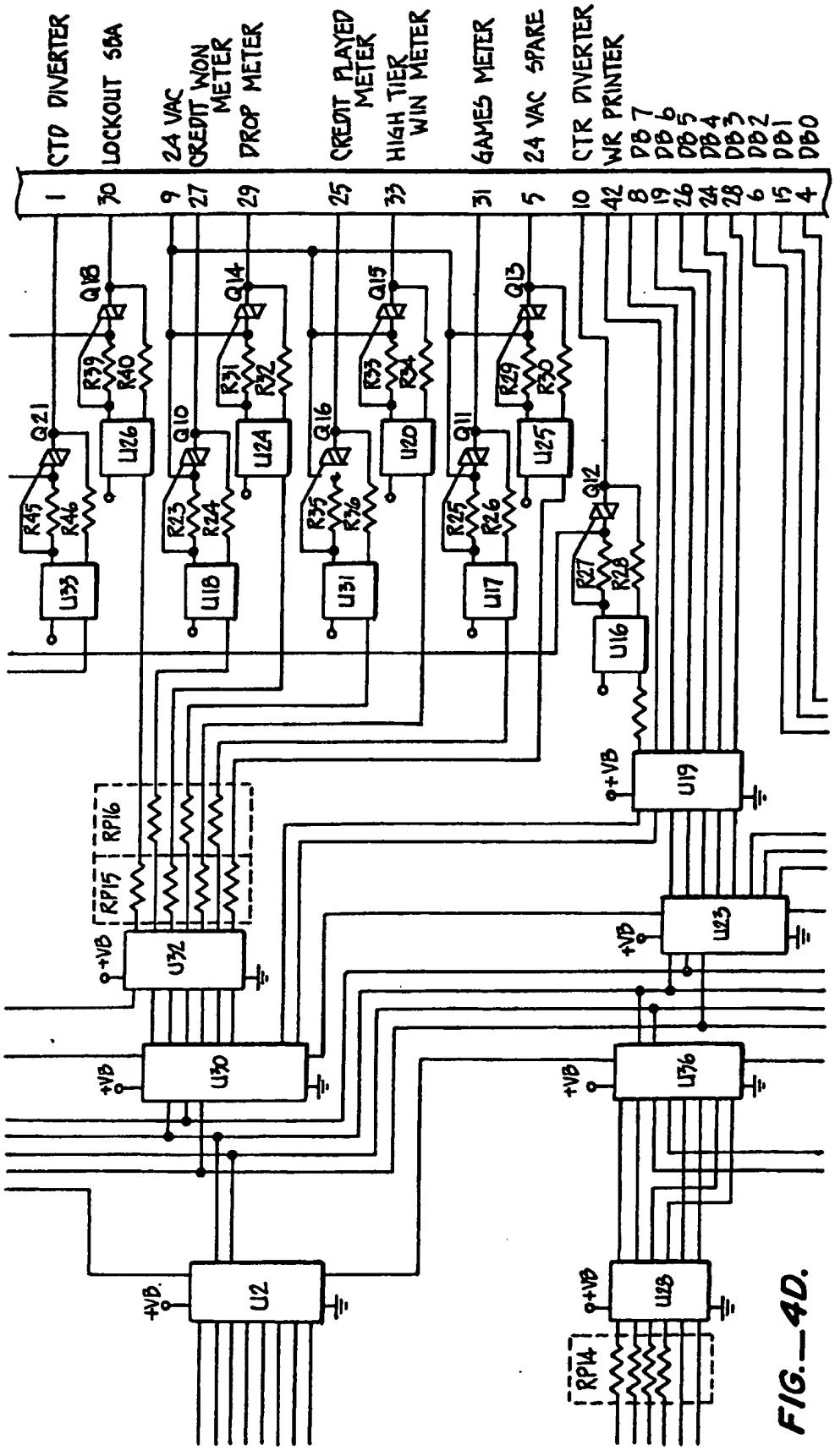

CTD DIVERTER
LOCKOUT SBA
24 VAC
CREDIT WON METER
DROP METER
CREDIT PLAYED METER
HIGH TIER WIN METER
GAMES METER
24 VAC SPARE
CTR DIVERTER WR PRINTER
DB 7
DB 6
DB 5
DB 4
DB 3
DB 2
DB 1
DB 0
1
30
9
27
29
25
33
31
5
10
42
8
19
26
24
28
6
15
4
Q18
Q14
Q15
Q13
Q21
Q10
Q16
Q11
Q12
R39
R40
R31
R32
R33
R34
R29
R30
R45
R46
R23
R24
R35
R36
R25
R26
R27
R28
U126
U124
U120
U125
U133
U118
U131
U117
U116
U19
U32
U23
U30
U136
U2
U28
RP16
RP15
RP14
+VB

FIG._4D.

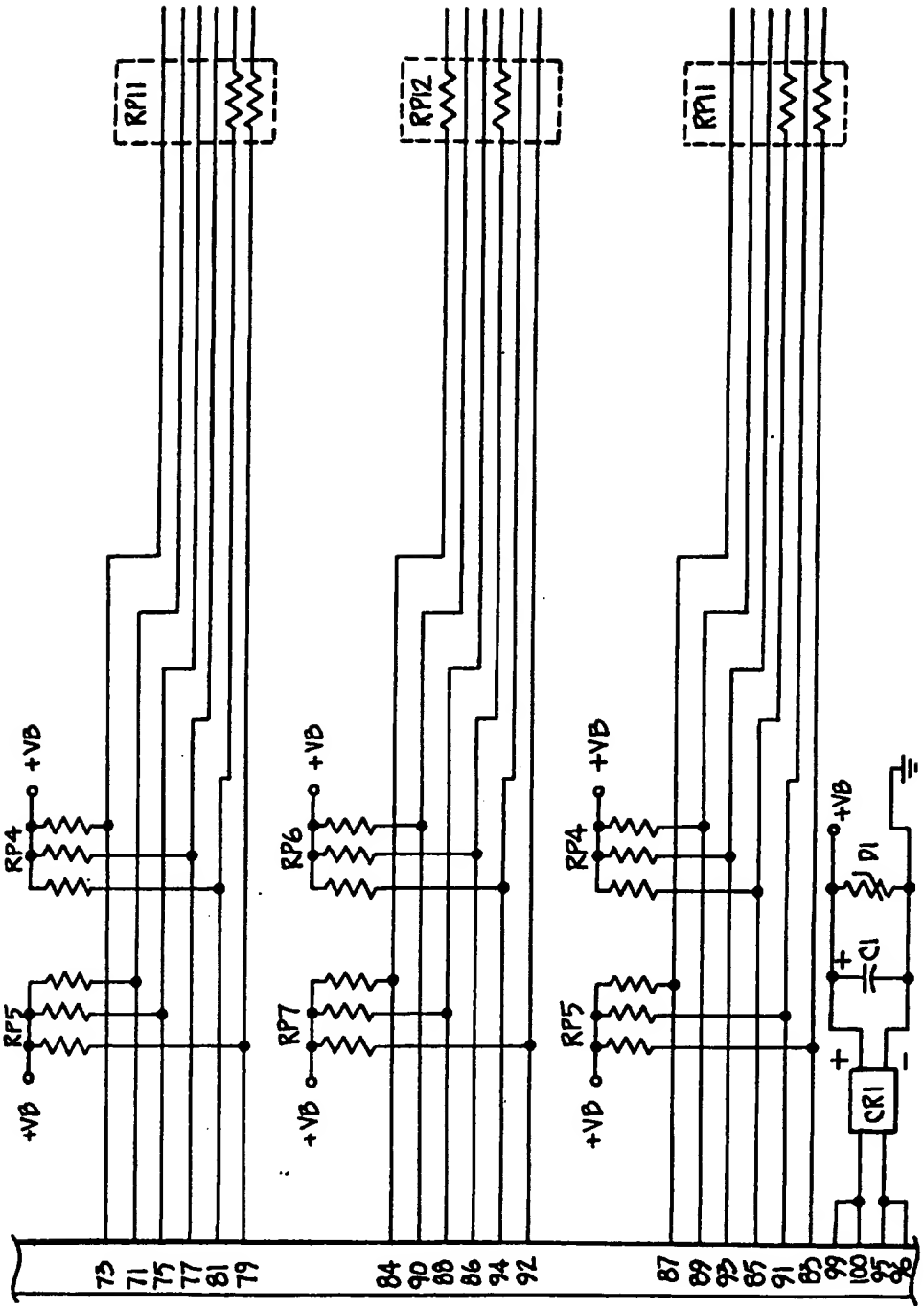

RP11
RP12
RP1
RP4
RP5
RP6
RP7
+VB
D1
C1
CR1
73
71
75
77
81
79
84
90
88
86
94
92
87
89
93
85
91
83
99
100
97
96
COIN REJECT SENSE
SELF TEST
COIN RETURN
PLAY CREDIT
CASH OUT
COIN IN C
DOOR OPEN/RECEIVE
PAPER LOW
PRINTER BUSY
PRINTER ERROR
NUETRAL SW
LPEN
COIN IN D
COIN IN E
COIN IN F
START SW
8VAC

FIG._4E.

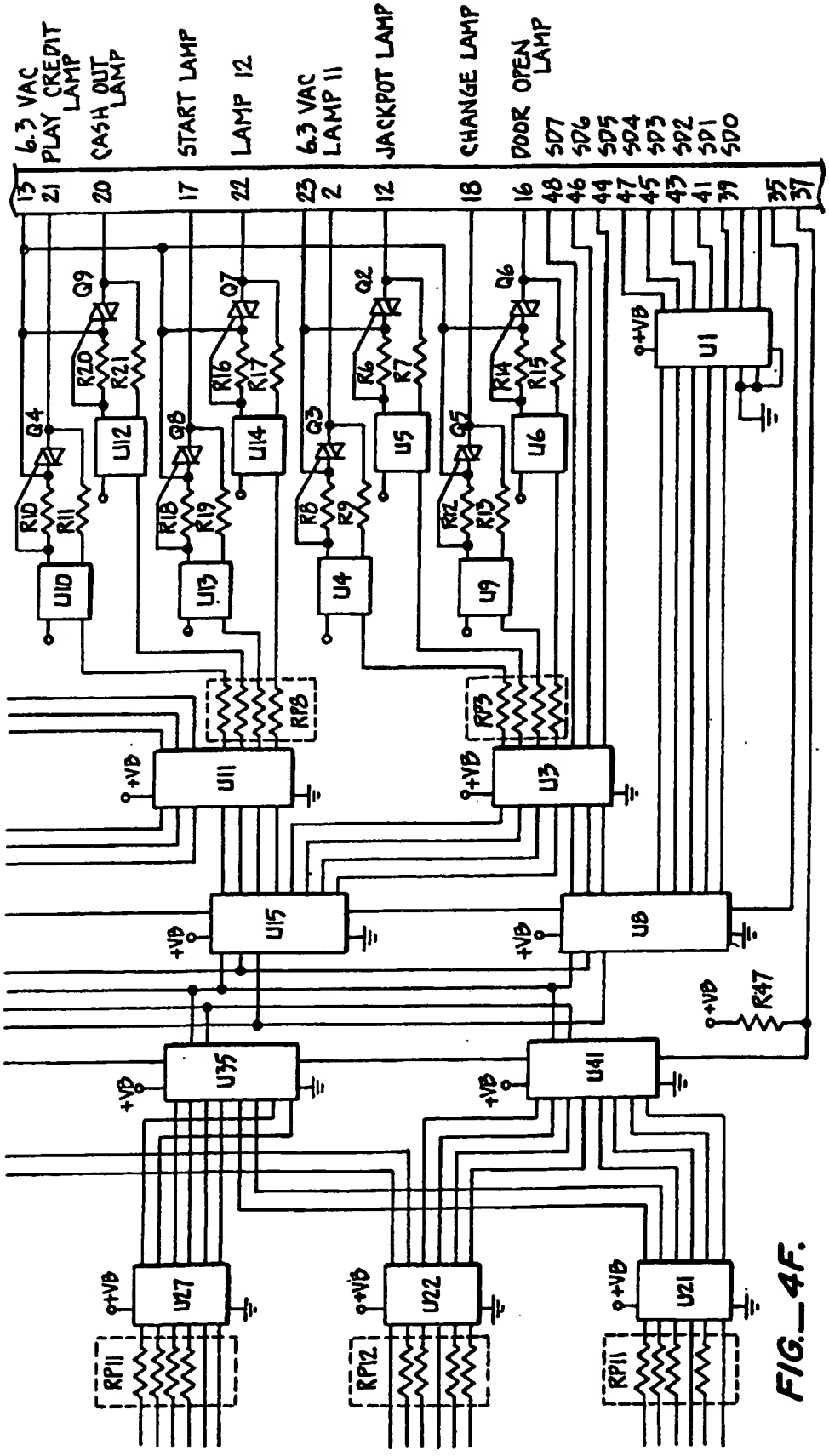

6.3 VAC
PLAY CREDIT LAMP
CASH OUT LAMP
START LAMP
LAMP 12
6.3 VAC
LAMP 11
JACKPOT LAMP
CHANGE LAMP
DOOR OPEN LAMP
SD7
SD6
SD5
SD4
SD3
SD2
SD1
SD0
15
21
20
17
22
23
2
12
18
16
48
46
44
47
45
43
41
39
35
37
+VB
R47
RP11
RP12
RP11

FIG._4F.

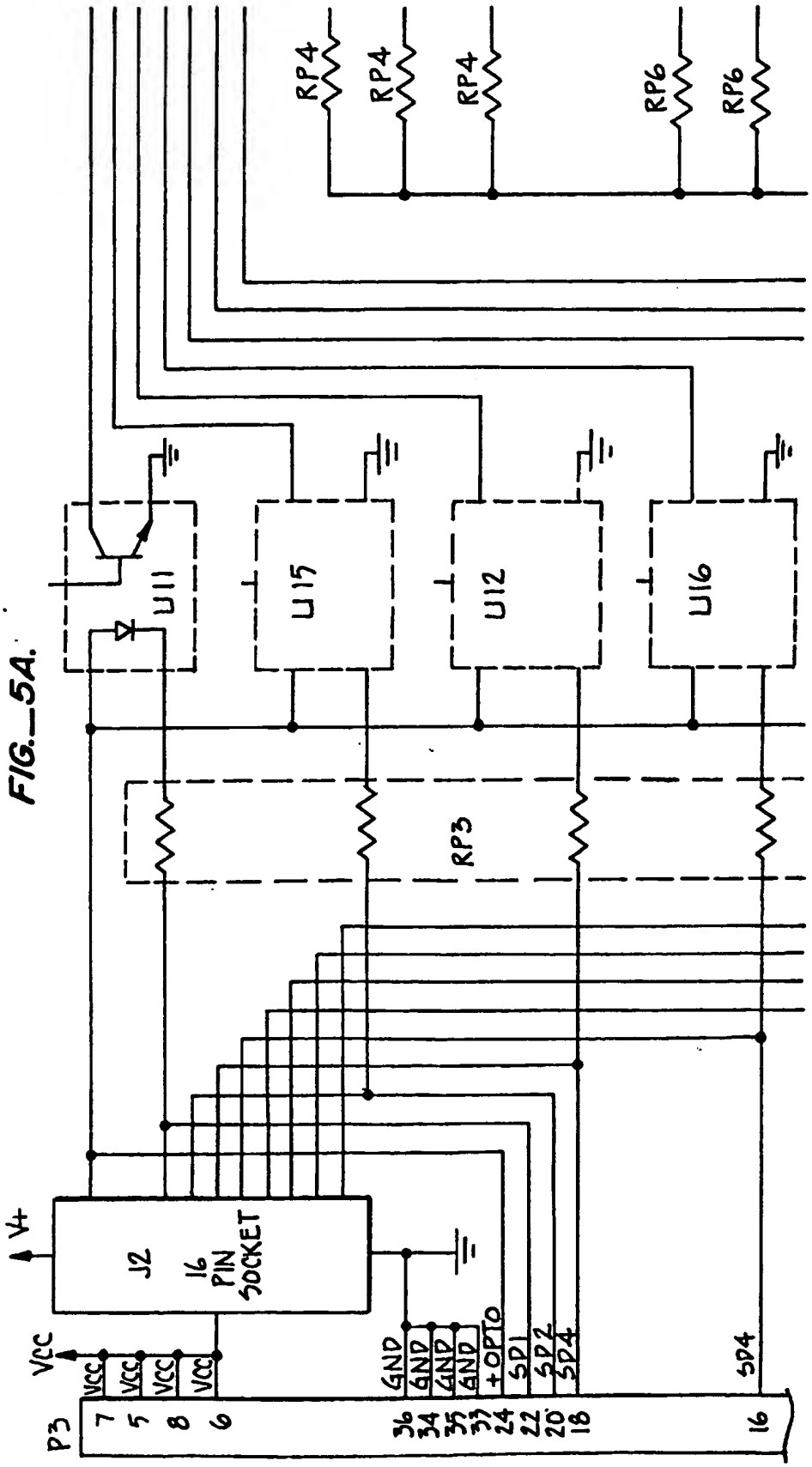

RP4
RP4
RP4
RP6
RP6
U11
U15
U12
U16
RP3
V+
J2
16 PIN SOCKET
VCC
VCC
VCC
VCC
VCC
GND
GND
GND
GND
+OPTO
SP1
SP2
SP4
SP4
P3
7
5
8
6
36
34
35
33
24
22
20
18
16

FIG._5A.

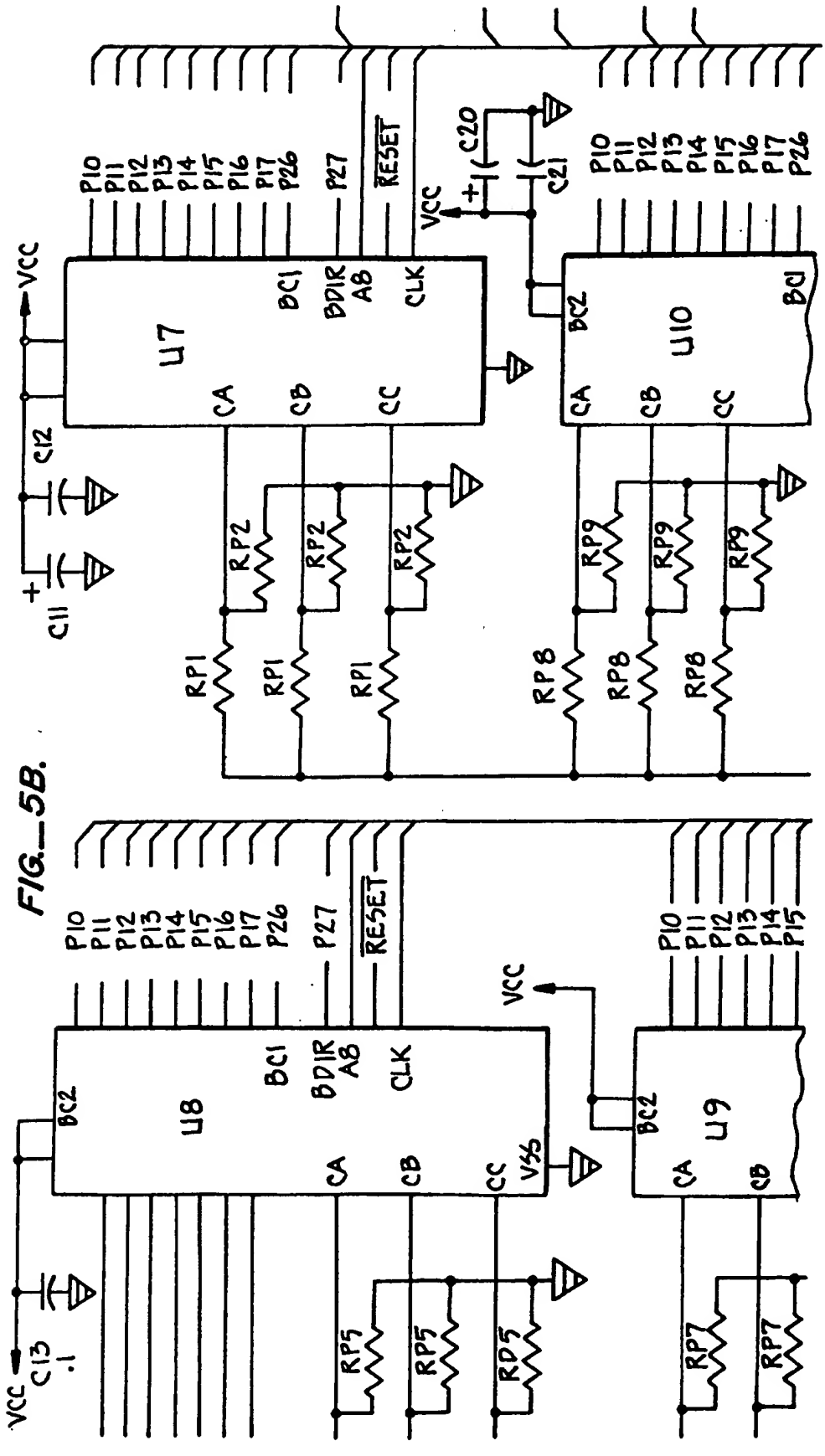

U7
U10
U8
U9
VCC
RESET
P10
P11
P12
P13
P14
P15
P16
P17
P26
P27
BC1
BDIR
A8
CLK
BC2
CA
CB
CC
VSS
C11
C12
C13
C20
C21
RP1
RP2
RP5
RP7
RP8
RP9

FIG_5B.

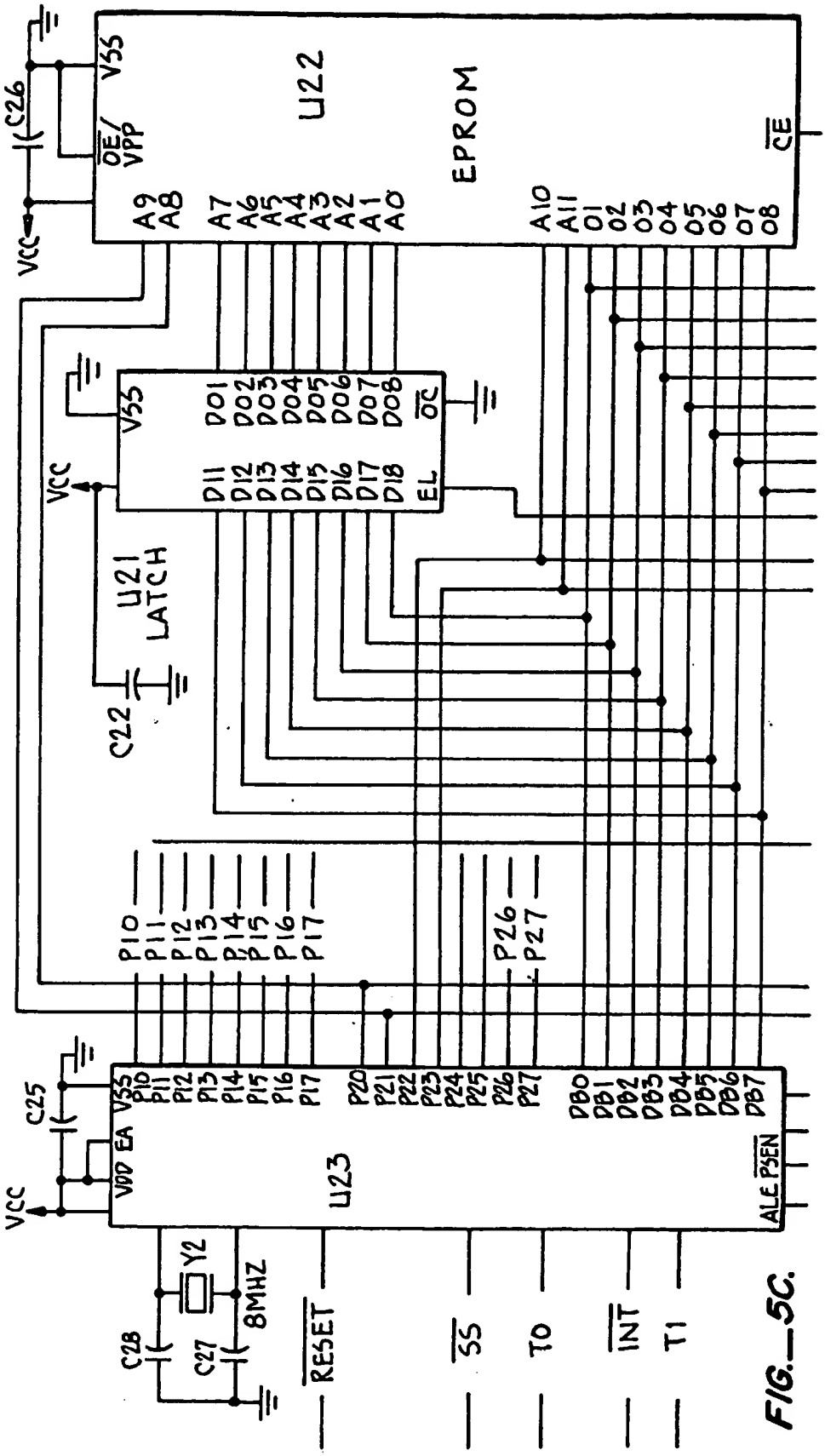

U22
EPROM
U21
LATCH
U23
C26
C22
C25
C28
C27
Y2
8MHZ
VCC
VSS
RESET
INT
T1
T0
ALE
PSEN
EA
VDD

FIG._5C.

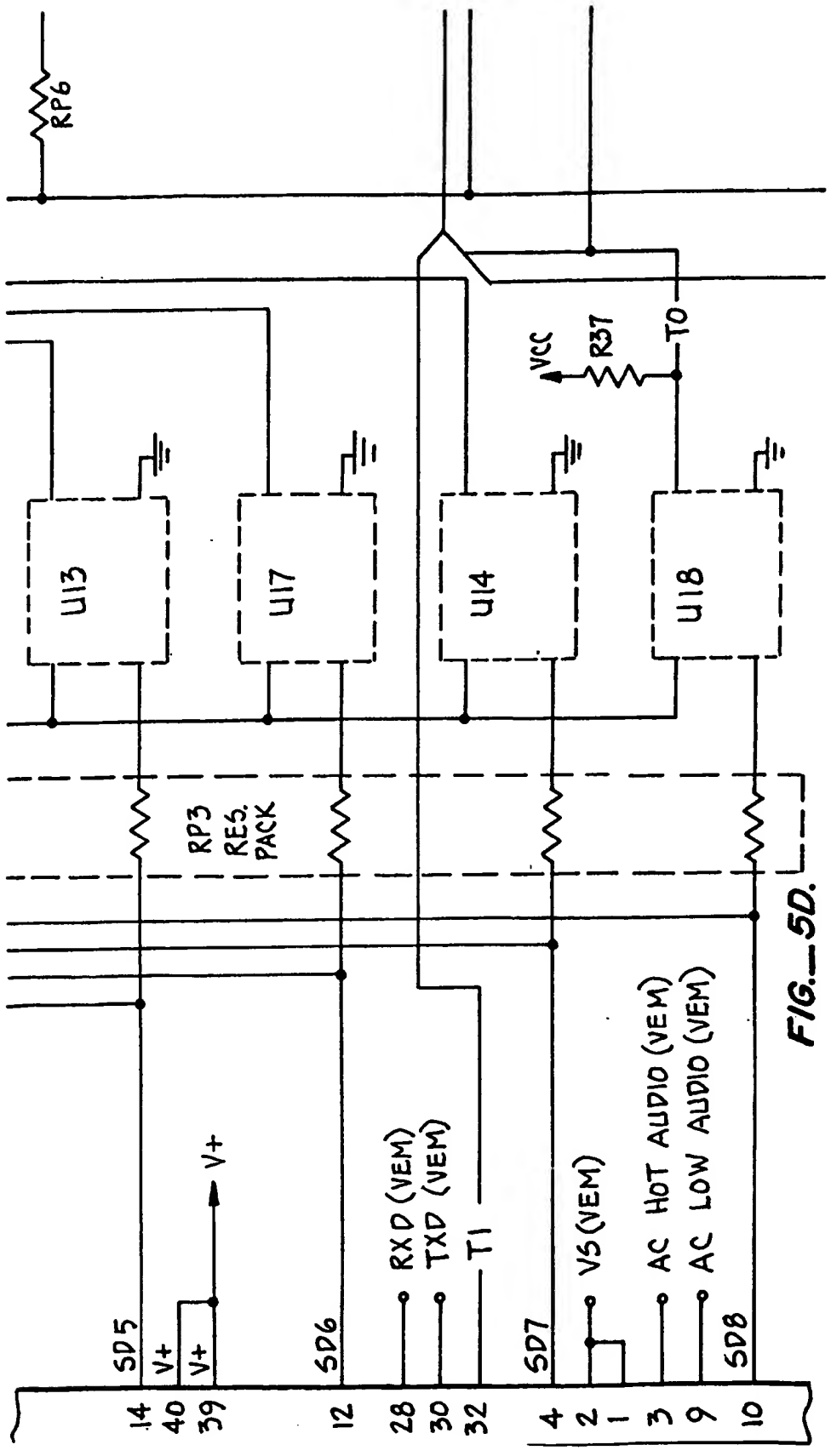

RP6
VCC
R37
TO
U13
U17
U14
U18
RP3
RES.
PACK
SD5
V+
V+
SD6
RXD (VEM)
TXD (VEM)
T1
SD7
VS (VEM)
AC HOT AUDIO (VEM)
AC LOW AUDIO (VEM)
SD8
14
40
39
12
28
30
32
4
2
1
3
9
10

FIG. 5D.

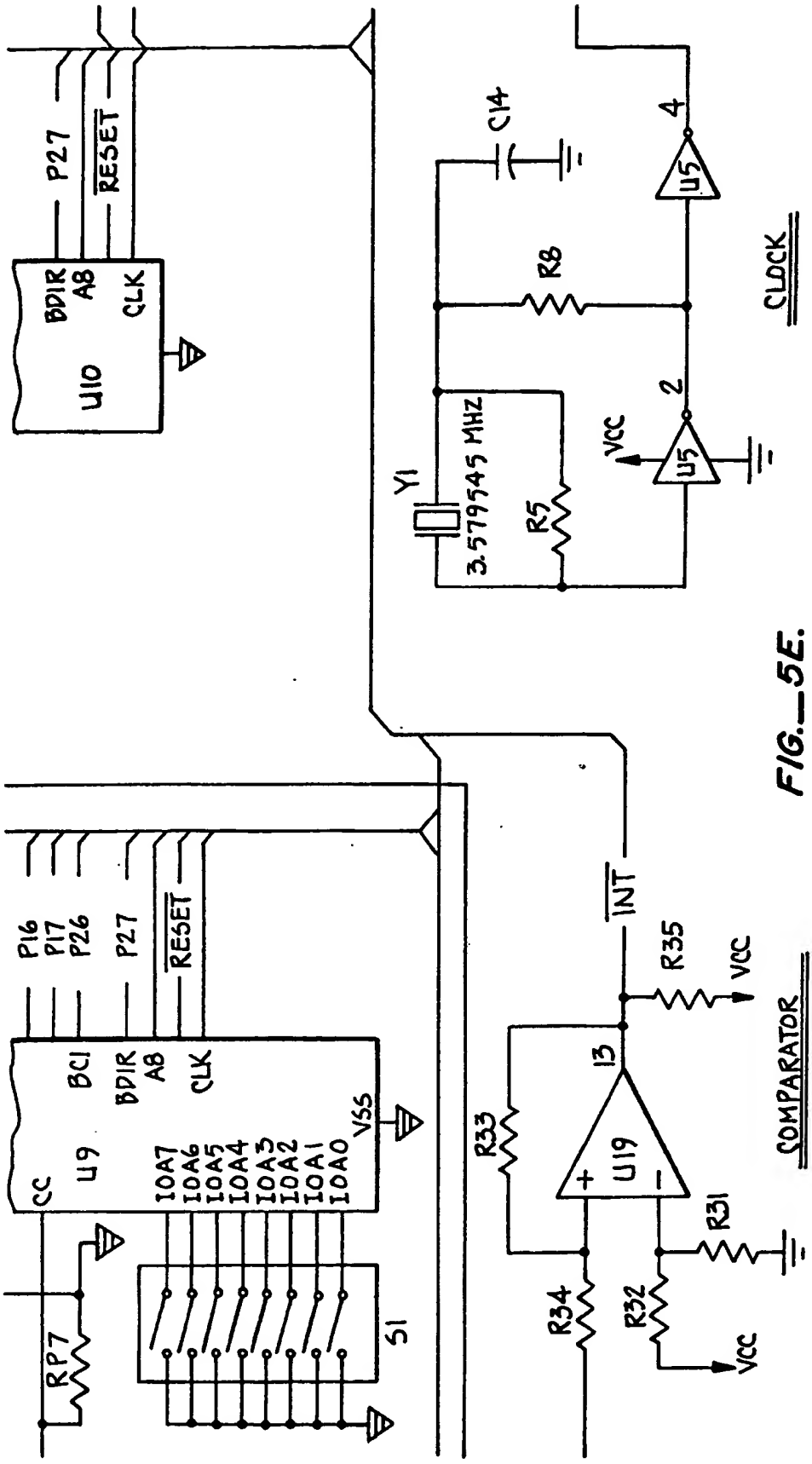

P27
RESET
BDIR
A8
CLK
U110
C14
4
U5
R8
CLOCK
2
VCC
U5
Y1
3.579545 MHz
R5
P16
P17
P26
P27
RESET
BCI
BDIR
A8
CLK
U9
VSS
CC
IOA7
IOA6
IOA5
IOA4
IOA3
IOA2
IOA1
IOA0
RP7
S1
INT
R35
VCC
13
R33
U119
+
-
COMPARATOR
R31
R34
R32
VCC

FIG._5E.

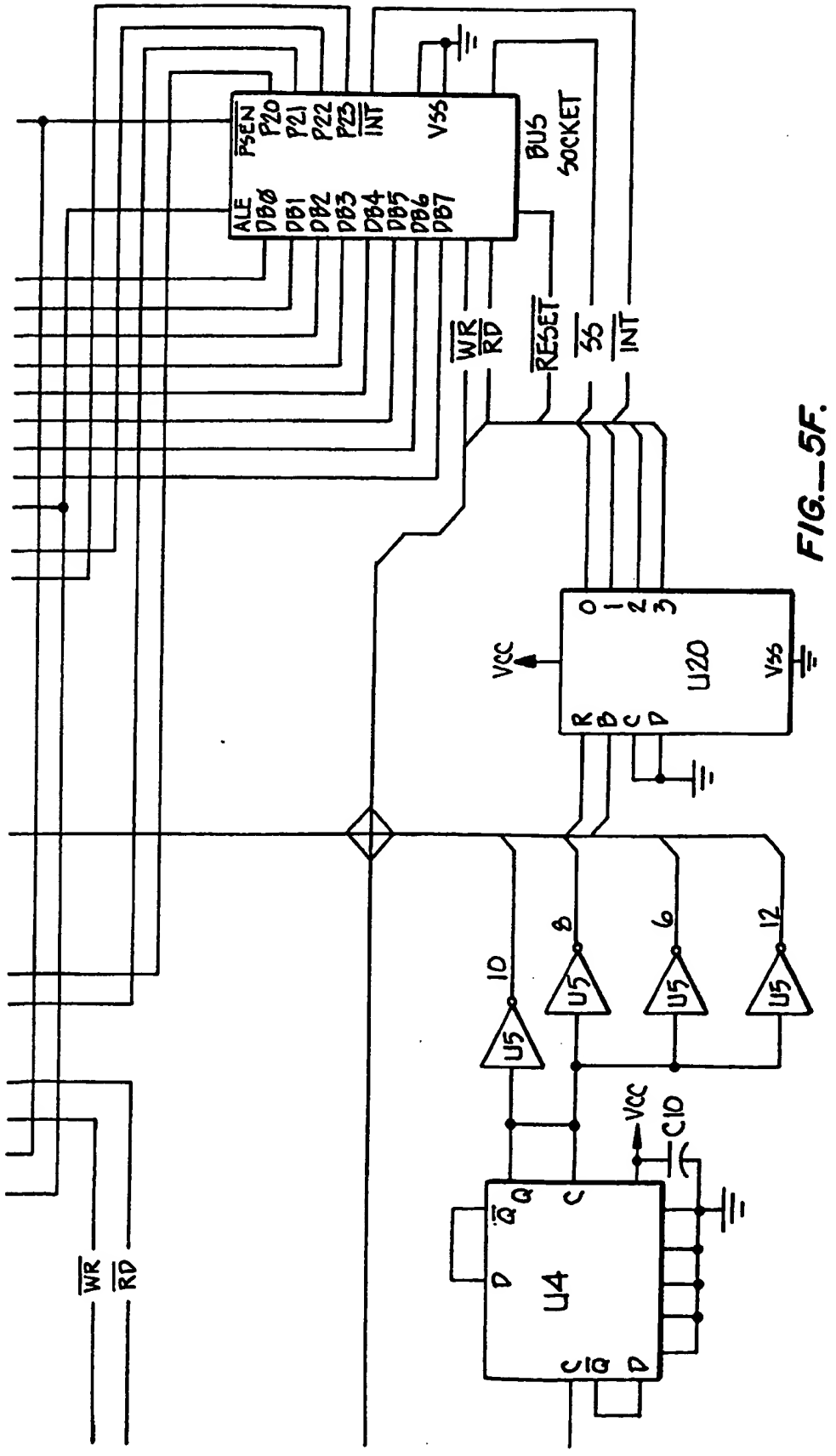

PSEN
P20
P21
P22
P23
INT
Vss
ALE
DB0
DB1
DB2
DB3
DB4
DB5
DB6
DB7
BUS SOCKET
WR
RD
RESET
SS
INT
U20
Vcc
R
B
C
D
0
1
2
3
U5
10
8
6
12
U4
Q
C
D
C10
WR
RD

FIG._5F.

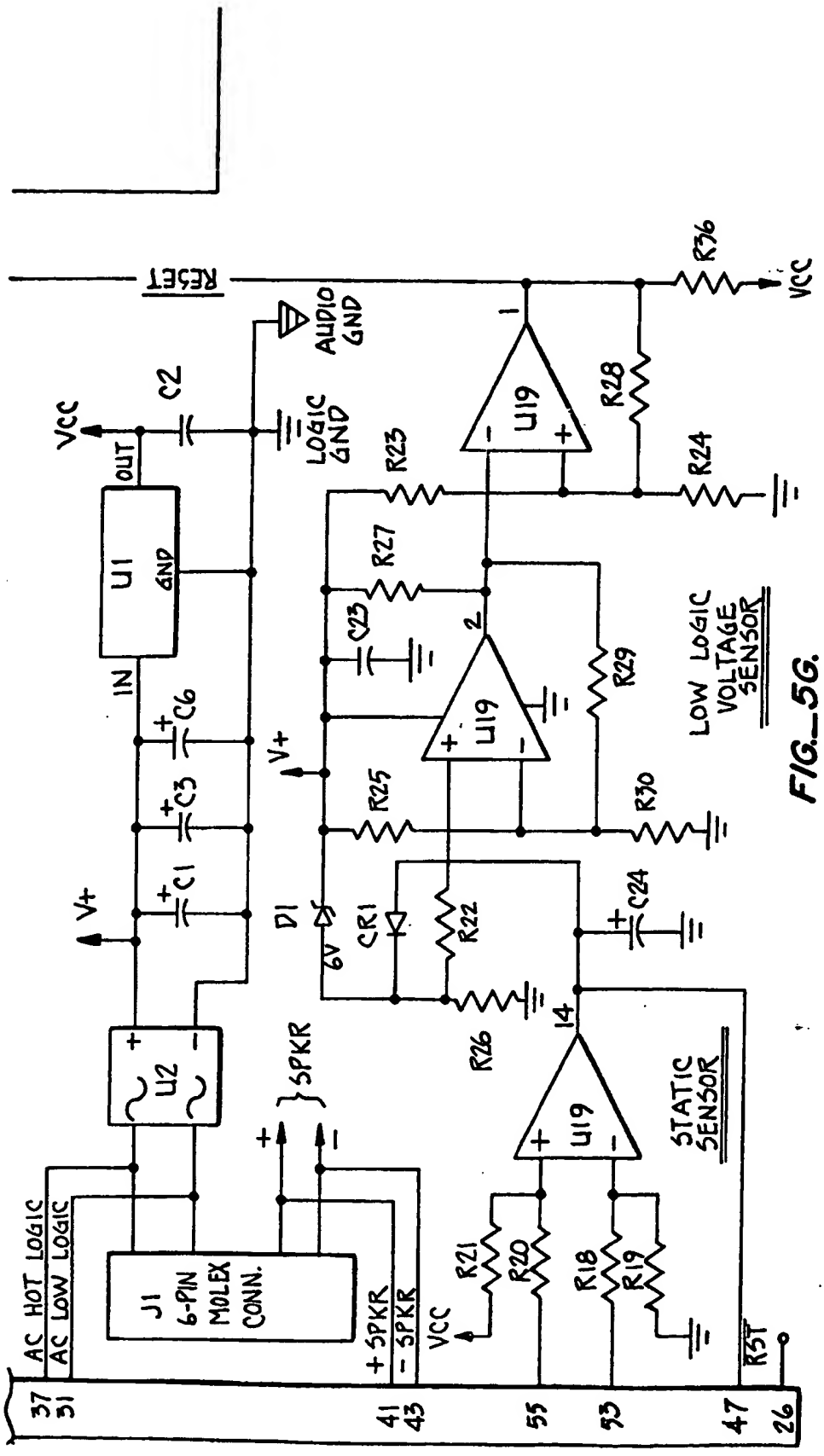

RESET
AUDIO GND
LOGIC GND
VCC
C2
OUT
U1
GND
IN
C6
C3
C1
V+
U2
SPKR
J1
6-PIN
MOLEX
CONN.
AC HOT LOGIC
AC LOW LOGIC
+ SPKR
- SPKR
VCC
R21
R20
R18
R19
RST
37
31
41
43
55
53
47
26
U19
R23
R27
C23
R25
D1
6V
CR1
R22
R26
14
R28
R24
R29
R30
C24
R36
LOW LOGIC VOLTAGE SENSOR
STATIC SENSOR

FIG._5G.

FIG 5A	FIG. 5B.	FIG. 5C.
FIG. 5D.	FIG. 5E.	FIG. 5F.
FIG. 5G	FIG. 5H.	

FIG._5.

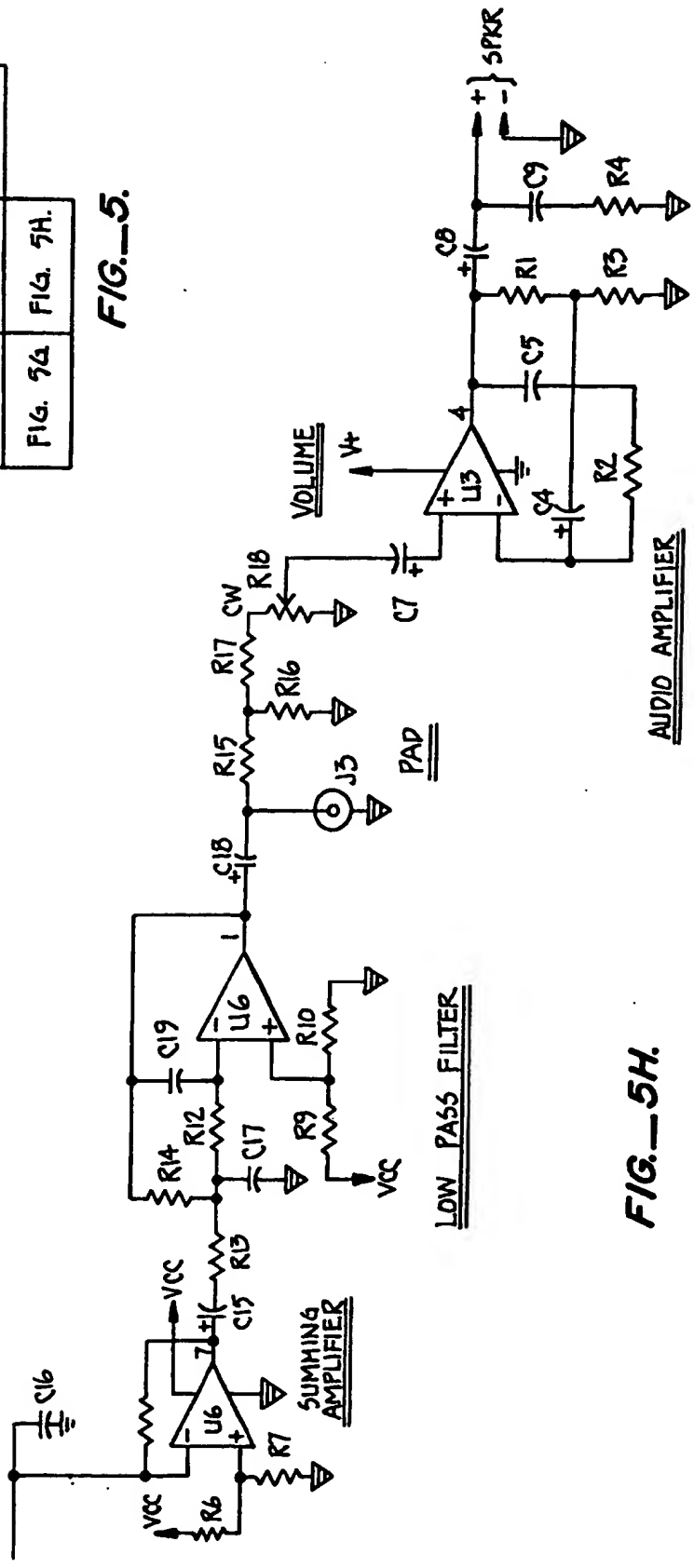


FIG._5H.

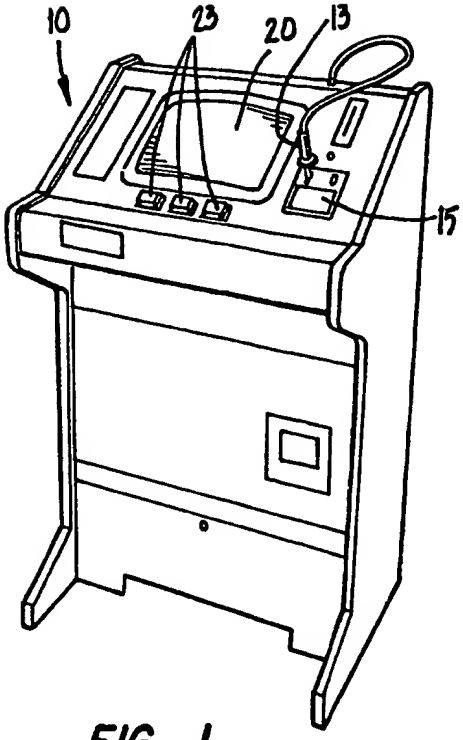


FIG._1.

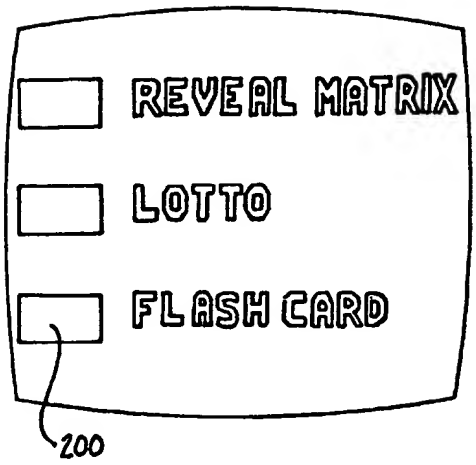


FIG._6.

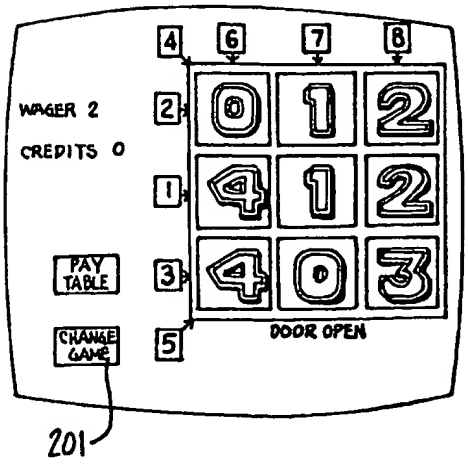


FIG._7A.

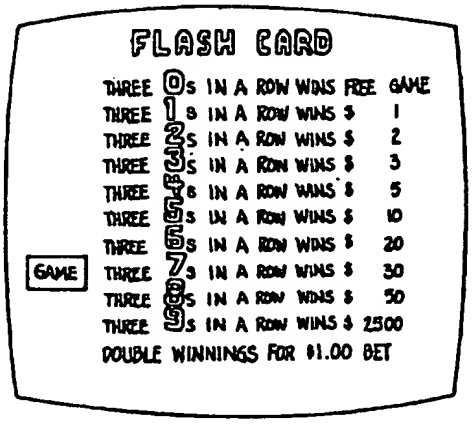


FIG._7B.

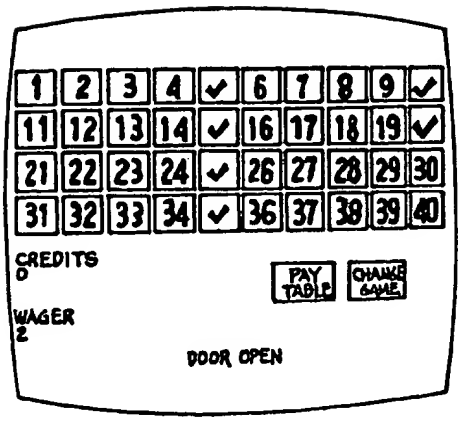


FIG._8A.

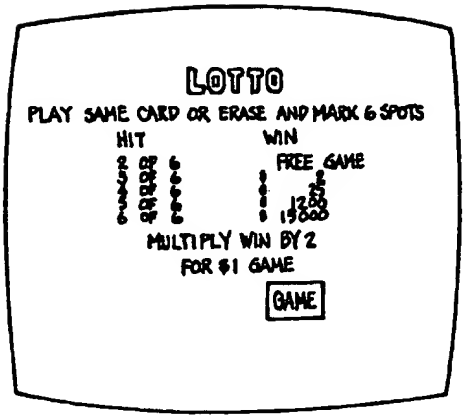


FIG._8B.

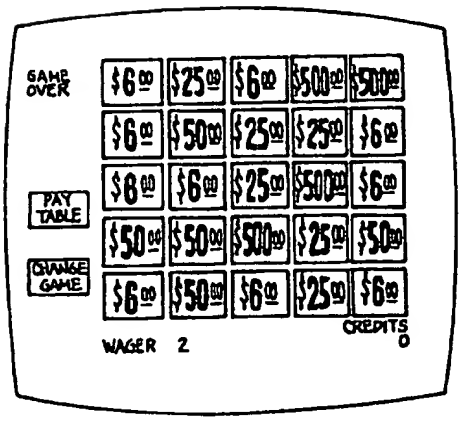


FIG._9A.

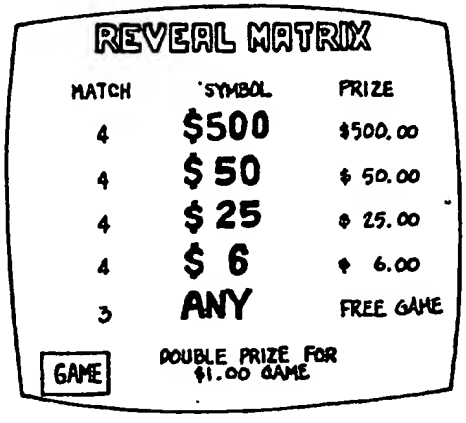


FIG._9B.

SPECIFICATION

Lottery game terminal

The present invention relates to electronic gaming devices. More particularly, the present invention relates to an electronic lottery game terminal for use in a lottery system, such as a state-supported lottery.

2. *Description of the prior art*

State run lotteries are well known and popular revenue raising enterprises. Such lotteries are benign forms of taxation that allow a lottery ticket purchaser to buy a chance to win a large cash prize. In exchange for this legalized gambling, the state makes a favorable profit running the lottery.

Most lotteries involve the sale of a ticket that may be either an instant winner or scratch-off type ticket, wherein the purchaser reveals an obscured number pattern in a matrix to determine on the spot if he is a winner; or a large jackpot type ticket, wherein the purchaser awaits selection and posting of winning ticket numbers, usually after an announced "drawing".

In all such state run lotteries, the purchase of a ticket is a vendor/vendee type transaction. That is, a purchaser goes to a ticket agent, purchases a ticket, and either scratches off a ticket coating which obscures the value of the ticket, or awaits the posting of a list of winning ticket numbers. In all such cases, there is no real game play involved in "playing" the lottery. Additionally, gameplay accounting and security are poorly supervised. As a result, it is not uncommon for ticket agents and game players to conspire to cheat the lottery. Nor is it unusual for forged lottery tickets to be presented to collect a prize.

Summary of the invention

The present invention provides a lottery game terminal either for use as a stand-alone unit or for use in a statewide lottery network. The lottery game terminal provides a game player with a choice of several lottery type games. Game selection is made by light pen selection of any one of several soft switches provided on a game terminal display main menu. Soft switches enable the player to select between a game display and an associated game pay schedule. Game play is also directed by a series of light pen operated soft display switches.

The lottery game terminal consists of the following modular components: a microprocessor; input/output circuitry; a tone generator; a printer and printer interface; and a color monitor. The microprocessor is the central control for the entire lottery game terminal. The microprocessor is a dual CPU circuit including a game processor for overseeing game, accounting, and input/output functions; and a video processor, for controlling game display functions.

Serial communication between the microprocessor and game components such as switches, sensors, detectors, and meters, is a function of serial communications via the input/output circuit. Thus, the tone generator, and printer and printer interface are coupled to the microprocessor via the input/output circuitry.

A separate serial link is provided directly to the microprocessor for coupling the lottery game terminal in parallel with other lottery game terminals in a lottery game system. In such arrangement, circuitry within the lottery game terminal allows it to be uniquely identified.

A light pen interface and color monitor operating circuitry are included as part of the video processor portion of the microprocessor. Video processor display images are formed from a plurality of image element character blocks stored in addressable character memory and displayed in a series of movable display planes.

It is a novel feature of the present invention that a lottery game terminal is provided for inclusion in a statewide lottery system. The lottery game terminal provides the game player with a plurality of selectable games designed to maintain player interest and to appeal to a broad player base. Novel circuit architecture provides high resolution color graphics and realistic sound effects to accompany game play and thus enhance the player's enjoyment. Lottery game terminal communications within a lottery system are encrypted to provide a high measure of security. Additionally, high-tier wins may require remote validation to ensure payment of valid wins only, and thus discourage cheating of the lottery game system.

Other security measures include a full complement of solid state and mechanical meters for storing game play statistical information and a complete battery backup system for maintaining game memory data intact. To this end, the game terminal architecture is that of a state machine wherein game play and operation is a function of a number of defined game states. Thus, game interruption - e.g. due to power failure -does not effect game play because previous game states are remembered and game play may continue at said states when game play is restored after the interruption is corrected.

Brief description of the drawings

Figure 1 is a perspective view showing a lottery game terminal according to the present invention;
Figure 2 is a block diagram of the lottery game terminal circuit;
Figure 3 is a schematic diagram of the lottery game terminal microprocessor circuit;
Figure 4 is a schematic diagram of the lottery game terminal interface circuit;
Figure 5 is a schematic diagram of the lottery game terminal tone generator circuit;
Figure 6 is an illustration of the lottery game terminal display showing a series of user selected lottery

games;

Figure 7A is an illustration of the lottery game terminal display showing a flash card type game;

Figure 7B is an illustration of the lottery game terminal display showing the flash card type game pay schedule;

Figure 8A is an illustration of the lottery game terminal display showing a lotto type game;

Figure 8B is an illustration of the lottery game terminal display showing the lotto type game pay schedule;

Figure 9A is an illustration of the lottery game terminal display showing a reveal matrix type game; and

Figure 9B is an illustration of the lottery game terminal display showing the reveal matrix type game pay schedule.

Detailed description of a preferred embodiment

A preferred embodiment of a lottery game terminal 10 is shown in perspective view in Figure 1. Terminal 10 includes a light pen 13, a color video monitor 20, and a series of input switches 23, by which various game terminal operations are performed. Although a color monitor is disclosed herein, other types of displays may be provided in its place, such as black and white monitors, plasma panels, and liquid crystal displays.

Terminal 10 also includes a coin slot 15. A player initiates game operation by inserting various denominations of coins into slot 15. The denomination inserted depends on the type of operation desired for the particular game being played.

Figure 2 is a block diagram of a preferred lottery game terminal circuit. The game terminal circuit includes five basic modules:

1) a microprocessor module 12;
2) an input/output module 14;
3) a tone generator module 16;
4) a printer interface module 18; and
5) a color monitor 20.

Microprocessor module 12 is the central control for the entire lottery game terminal. The microprocessor module is of a dual CPU architecture and is accordingly under control of a game processor 34 and a video processor 37. Each of the two processors manages a separate game terminal function, thereby providing improved system performance and integrity.

Game processor 34 produces the signals necessary to communicate with all external modules except color monitor 20. The external modules control such items as input switches 23; various sensor inputs, such as a "door open" detector 22; meters 27; various game operation solenoids (not shown); game lamps 26; tone generator module 16 including its associated speaker 17; printer interface 18, including its associated printer 19 and paper cut mechanism 21; and serial communications channels to a lottery agent terminal 11. Game microprocessor 34 also controls game execution. Accordingly, game processor 34 supervises all decoding, command instructions, and data flow in the lottery game terminal circuit.

Game processor 34 includes a serial link to the lottery agent terminal, as described above. The present lottery game terminal is intended for use either as a stand-alone game or in a lottery gaming system. The preferred embodiment of the invention provides a plurality of lottery game terminasl coupled in parallel on a serial bus and in communication with a lottery agent terminal. Each terminal in such a lottery gaming system is uniquely identified by a hardware and/or software ID tag, discussed below.

A video lottery system with which a preferred embodiment of the present invention may be used is the subject of pending patent application 8423031 (Agents Ref 15071A) entitled "Video Lottery System". The lottery system disclosed therein was invented by the inventors herein and is assigned to the assignee of the present invention, IGT Corporation of Reno, Nevada. The above-mentioned pending patent application is not considered essential to an understanding of the present invention, but is included to orient the reader to the type of lottery system with which the present invention can be used.

I/O module 14 handles the transfer of information between the various input/output devices and microprocessor module 12. I/O module 14 includes an input buffer 28, an input shift register 29, an output shift register 30 and an output drive register 31. Because communication between I/O module 14 and microprocessor module 12 is serial, there is a high degree of I/O flexibility. As a result various types of game play are provided by the present invention.

The following is an exemplary list of the output devices connected to I½O module output shift register 30 via output drive register 31 that are under control of game processor 34:

1) Printer interface module 18 - transfers ASCII commands in characters; printer 19 may be provided with a unique and controlled paper stock and proprietary printer font as a security measure.

2) Tone generator module 16 - transfers sound commands.

3) Lockout solenoids (diverters lockout) - controls passage of coins through acceptors (slots) 15.

4) Meters 27 - electrically and mechanical providing number-of-games, credits won, high tier win, credits played, and cash box meter indications.

5) Lamps 26 (indicators) - error lamps (door open and malfunction), switch lamps (depending on games), and optical door-open emitter,

6) Optical "door open" detector 25 - part of door-open sensor; detects entries into the game terminal

cabinet.

The following is an exemplary list of input devices connected via I/O module input buffer 28 to input shift register 29 that are under control, and that produce actuating input signals for game processor 34:

1) Optical "coin in" detectors 22 - produce a valid coin-in signal after coin falls past optical sensors; can also detect coin travel direction; typically includes antistringing and slugging detectors to provide a high degree of game security.

2) Input switches 23 and option switches 24 (depending on game).

3) Printer interface module 18 - transfers status/error characters from printer 19.

I/O module 14 provides a serial interface function to couple terminal input and output signals between microprocessor module 12 and various game I/O modules and devices. The I/O signals are optically coupled to I/O module 14 and from I/O module 14 to microprocessor module 12, to eliminate noise carried by conventional circuit wiring. Reliability and security are therefore hallmark features of the present lottery game terminal.

I/O module 14 is coupled to game processor 34 via an I/O control circuit 32, which is a bidirectional serial/parallel shift register. Game processor 34 includes a serial communication port which furnishes a data acquisition system communication point for data exchange between the lottery game terminal and either lottery agent terminal 11 or a lottery system control computer (not shown). A dual communications port 36 is provided as a peripheral device by which data are transmitted between game processor 34 and video processor 37.

A watchdog circuit 33 monitors the running of a control program in game processor 34. Watchdog circuit 33 is a safety circuit that is included to prevent false processing of program data. Any deviation of program selections, such as erroneous timing due to static or component failure, causes termination of game operation.

A CMOS memory module 35 provides game processor 34 with a nonvolatile memory to maintain meter, game summary, and status information. CMOS memory module 35 has separate battery powered retention and back-up battery failure detection circuits to safeguard memory-resident data in the case of power or equipment failure. An exemplary battery (not shown), such as a lithium battery, can maintain the data in the memory module more than six months in five years of continuous use.

CMOS memory module 35 can also be removed from the microprocessor module during lottery game terminal maintenance or replacement. CMOS memory module 35 can thereafter be replaced in new or remanufactured equipment while maintaining the meter information intact. An exemplary memory backup circuit may be provided by a "Look-Ahead State-Saving Device", which is the subject of pending patent application Serial No. 447,358, filed 6 Dece,ber 1982, invented by Logan L. Pease and William Wells, and assigned to IGT Corporation of Reno, Nevada, the assignee of the present patent application.

Video processor 37 provides signals to select and display images on color monitor 20. Because color monitors are well known in the electrical arts, a circuit diagram of an exemplary monitor is not considered necessary for a complete, enabling disclosure of the present invention. Images formed by color monitor 20 are composed of image element character blocks represented in an addressable character memory 47. The image element character can be moved to any location on the video display screen area, held stationary, or moved continuously. Video processor all video operations for the game in accordance with commands transmitted from game processor 34 via a dual communications port 36. Video processor 37 may be of the type described in pending patent application Serial No. 406,672, filed 9 August 1982, entitled "Video Processing Architecture", invented by Wesley F. Carmean, and assigned to the assignee of the present patent application, IGT Corporation of Reno, Nevada.

A cathode ray tube (CRT) control circuit 38 operates under video processor control and generates control and addressing signals for a character generator circuit 39 and also generates horizontal/vertical video synchronization signals for color monitor 20. Each image element character block is stored in character generator circuit 39 and addressed by character memory 47. Character memory 47 is loaded by video processor 37, which controls the makeup of images. Provision is also made within CRT control circuit 38 for interfacing light pen 13. Light pen 13 provides an optical link between color display 20 and microprocessor module 12. The light pen has an armor shielded cable to prevent breakage due to misuse or vandalism.

A plane color control circuit 40 mixes image element character blocks from character generator circuit 39 to make up each of the displayed image planes. The image planes can be moved continuously in any direction or held in a stationary position on color monitor 20. Plane color control circuit 40 also provides color selection information to each of the displayed image planes.

The assembled image, which consists of a composite of stationary and movable parts within the several displayed image planes, is provided to a digital-to-analog converter circuit 41. Digital information that comprises the game images is converted by the digital-to-analog converter circuit 41 to analog video signals corresponding to the signal components and representing the primary colors red, green, and blue. Video signal information is coupled via an external connector (not shown) to color monitor 20. Horizontal and vertical synchronization pulses from CRT control circuit 38 are also coupled to color monitor 20 at this connector.

Tone generator module 16 produces a wide range of sound effects in response to commands sent to it from microprocessor module 12 via I/O module 14. Input interface circuit 42 includes input optical isolators to provide a unidirectional communication path between microprocessor module 12 and tone generator

module 16 having high immunity to noise. Such noise immunity is the result of electrical isolation of tone generator module 16 from I/O module 14.

A tone processor 43 operates under control of a program resident in a tone processor memory 44 to supervise the decoding, command instructions, and data flow in tone generator module 16. A programmable sound generator circuit 45 receives commands from tone processor 43 and produces selected audio signals in accordance therewith. Flexible programming capability allows a wide variety of sound effects and music to be produced with a single system. Audio power amplifier 46 amplifies audio produced by sound generator circuit 45 to drive loudspeaker 17.

Printer interface 18 controls a bidirectional communication link between game processor 34 and solenoid motor driver circuit 51. Solenoid motor driver circuit 51. Solenoid motor driver circuit 51 activates printer 19 and paper cut mechanism 21. Printer interface 18 also activates a paper advance mechanism within printer 19 and detects a paper low condition.

Input/output buffer 48 is a bidirectional communication link between printer interface 18 and I/O module 14. Data input to printer interface 18 are in the form of ASCII characters and commands. Outputs from printer interface 18 are status and error bits for detecting problems occuring during otherwise normal operating conditions.

A printer processor control and character program resident in memory 50 provides operating instructions for printer interface processor 49, which in turn supervises all decoding, command instructions, and data flow in printer interface 18. In case of power failure, a power detect circuit associated with printer interface processor 49 maintains processor integrity by providing failure detection messages to microprocessor module 12.

Solenoid power source for activating stepper motors (not shown) within a print head driver and solenoids (not shown) within the printer and the paper cut mechanism. Printer sensor (paper low, etc.) and paper cutter sensor outputs are routed through a sensor buffer circuit 52 to printer interface processor 49. The specific mechanical structure of the printer is not shown herein. The mechanical aspects of printers are well known in the mechanical arts - a discussion of these aspects in this patent application is not considered necessary to provide a complete enabling disclosure of the invention.

Figure 3 is a schematic diagram of an exemplary microprocessor module. Table 1 provides a list of industry standard components that may be used in an exemplary embodiment of the invention constructed according to the circuit disclosed in Figures 3-5. Game processor U39 operates in accordance with program instructions stored in ROM memory U36/U37. Communications between the microprocessor module and the other modules in the circuit are via optoisolators U3/U11-U15. Communications with video processor 37 are via dual communications port 37, which is comprised of latches U52/U53. Game microprocessor U39 also includes a half duplex serial data line for two-way communication with an agent terminal in a lottery system. A plurality of lottery game terminals are provided in the exemplary embodiment of the invention. Each lottery game terminal is connected to the serial bus in parallel with the other lottery gram terminals. An agent terminal or central computer addresses a selected one of the lottery game terminals by sending a uniue header message which may be hardware or software detected only by the addressed lottery game terminal. Thus, the first data word shifted to the data bus from shift register U40 is only recognized by a particular lottery game terminal. In other embodiments of the invention, a hardware decoder and latch circuit (such as circuit 11a shown in Figure 2B) may be set when a unique switch-selected data word is received at the addressed lottery game terminal.

TABLE 1

Exemplary components listing

Identifier	*Figure*	*Industry designation*
U2/U3/U11-U15	3	GN139
U10		2003
U16/U41		74LS04
U22		LM3302
U23		4584
U24		74LS138
U25		74LS193
U26		4098
U28		4040
U29		4027
U36/U37		2764
U38		74LS373
U39		8051
U40		4094
U42		4021
U52/53		74NC374
U54		74LS32
U57		74LS74
U87		LM338
U1/U3/U11/U19/U32/U43	4	2003
U2/U35/U36/U41		4021
U4-U6/U9/U10/U12/ U16-U18/U20/U24/ U26/U29/U33/U34/ U37/U38/U40		
U8/U15/U23/U30/U39		H11A1
U21/U22/U27/U28		4094
		14584
U1	5	LM323
U2		MDAA970
U3		TDA2002V
U4		MC14013
U5		4096
U6		LM324
U7-U10		8912
U12-U18		H11A1
U19		LM3302
U20		MC14028
U21		74LS373
U22		2732A
U23		8039

Figure 4 is a schematic diagram of a lottery game terminal interface module. The diagram shows a plurality of latches that are addressable according to a decoded memory address present at decoder U2. When addressed, each latch produces an output signal indicative of a signal condition at the latches input. Accordingly, optoisolated output signals are provided to operate various lottery game terminal features. Some such operation is the result of address and data information provided by the microprocessor module. Other such control is a function of combinational logic in the interface module itself. The interface module also provides a data bus which couples the microprocessor module to the tone generator module.

Figure 5 is a schematic diagram of an exemplary tone generator module. Data from the interface module is coupled to the tone generator module by means of optoisolators U12-U18. A sound generator circuit U7-U10 produces tones in accordance with data supplied from the interface module and under the control of a central processing unit U23. The CPU operates the sound generator circuit to generate these tones in accordance with tone program instructions stored in EPROM U22. Signals output from tone generator U7-U10 are mixed at a summing amplifier U6-U7, filtered by low pass filter U6-1, and amplified for reproduction by speaker at a cabinet mounted amplifier U3-4. Various switches S1 are included that may be set to preprogram certain sound effects.

Lottery game terminal packaging provides modular construction such that all assemblies can be easily removed or replaced for field service. The major assemblies packaged in lottery game terminal (as shown in Figure 1) include the following:

1) Monitor Assembly - the monitor assembly contains a shielded color monitor 20 having four-way mechanical adjustment of viewing angle. A card cage assembly (not shown) is provided in a locking container to house microprocessor module 12, I/O module 14, and tone generator module 16. A power assembly (not shown) is also provided which contains a transformer, line filter fuses, circuit breaker, and line switch. A printer assembly includes printer 19, printer interface 18, paper, paper cut mechanism 21, and a paper holder.

2) Coin Handlers - coin handling is aided by use of electronic acceptors - preadjusted assemblies that sense metallic content and size of coin for acceptance.

3) "Coin In" Detector - coin-in detector 22 is an optical into the lottery game terminate to initiate game play. A holding cup (not shown) is provided to hold these coins until the game is started by player or coin reject switch selection. If coin reject switch operation is sensed, the coins are returned to the player. If the player starts the game, the coins are diverted to the drop box. It should be appreciated that some of the elements and components relating to the present invention are not shown in the figures herein or are not discussed in detail. Those elements and components are considered to be well known in the art and, at any rate, not essential to an understanding of the invention and are not elements or components of the invention itself at the point of novelty.

All assemblies can be accessed at front and top portions of the lottery game terminal. This arrangement expedites service and maintenance activities. Various lamps within the lottery game terminal include a service lamp; a convenience outlet is also provided. Printer paper is accessed by opening a top portion of the lottery game terminal.

Security enhancements to the present invention include a recessed connector housing (not shown) to protect connectors and cables. The connector housing is water tight and therefore resistant to damage resulting from spilled beverages. A two-stage error indicator lamp (one of lamps 26) is mounted at a top portion of the lottery game terminal to indicate game door open and game malfunction. A flange around the door frame prevents unauthorized entry into the game cabinet. Optical door open detector 25 detects if the door is unlocked and/or opened and produces an actuating signal in response thereto.

Lottery game terminal security measures include a metal lined cabinet, stages multi-key cabinet entry, and electronic coin acceptors having anti-stringing and anti-slugging measures which include an agent alarm. Also included is a last game recall to help resolve game result disputes and static and RFI protection circuits.

The lottery game terminal reports maintenance problems and security violations to a central computer through a serial link with the agent terminal. A separate memory section is provided having keyed entry (agents do not have key to this compartment) and electronic door open detection. There is a continuous self testing of memory and provision for external memory verification.

Game program software is resident in the game terminal. rather than being down-line loaded. In this way, the possibility of reprogramming a game terminal or intercepting a game program is eliminated. The game includes a secure coin container, having a heavy duty door and separate keyed entry. Power-down and surge protection is provided, and an optical door open condition reporting circuit is also provided. Memory is battery backed-up and may be removed to prevent tampering during a maintenance routine. Additionally, the printer uses a unique paper stock that is subject to state lottery control and upon which characters are printed according to a proprietary printer font that is not readily duplicated.

Game states are described here to aid in explaining the various functions of the games. Fixed states are described for all games because this approach simplifies a supervisor software program considerably and allows the supervisor program to perform nearly all game-independent functions. The first eight states (0-7) are reserved for the supervisor program. The remaining states are assigned by the game-dependent code as desired.

State 0 is the idle state, although state 0 also includes all of the following functions:

1. Sees that the remote agent terminal is operational and locks out the game if it isn't.

2. Enables the coin lockout(s) if no credits are available for play.

3. Monitors the coin detectors and play credit switch, and goes to state 1 when a coin is inserted or a credit is bet. Monitors the meter display switch and performs the related displays. (Display meters is a separate function called by state 0, not an integral part of it.)

4. Monitors the light pen position and switches between game display and the pay table as requested by the player.

5. Switches among the four games if the player selects the "change game" soft switch on the screen.

6. Monitors the cash out switch and goes to state 7 to print a ticket (or cash out for gaming machines) when it is pressed.

7. Performs the "attract mode" functions (switching from game to game displaying "last game" and "pay table" for each game) after no play has taken place for one minute.

The game is in state 1 whenever the current wager (credits plus coins) is non-zero and less than the maximum bet for the game currently selected. Pressing the coin reject switch returns all coins in escrow (coins deposited by the player for the current game). If no credits were bet before inserting the coin(s) that were returned, then the game reverts to state 0. If credits have been bet, the coins cannot be returned and the player must play the game.

Game-dependent code is called periodically to allow the game to select numbers, start the game, etc. The game may be started from state 1 (providing the bet is even and the correct number of squares have been selected.) This is to allow for additional coin(s) after the lockout(s) are disabled.

The game is in state 2 whenever the maximum bet is made but before the game is started. Game-dependent code may allow selection of numbers, etc. in this state. The lockout(s) are disabled. However, if additional coins are detected or if the coin reject button is pushed, the coins are returned as in state 1. This state monitors the start switch and the "start" soft switch.

State 3 is the game accounting state. State 3 first waits 250 msec. in case an additional coin is detected. If not, the coins that are in escrow are dumped into the drop and counted. The mechanical and CMOS RAM memory "games played" meters are incremented. The "last game" is saved for display in meter mode. (Game dependent code saves the necessary information in whatever state(s) is(are) most convenient for that game.)

State 4 is the loser state. The video and sound processors are notified of the loss. State 5 is the winner state. The video and sound processors are notified of the winner. If the amount won equals the wager (i.e. bet returned) then this is considered a "free game" and no credits are awarded. The video processor displays "free game" and the game processor turns on the play credit lamp. When the play credit switch is pressed, control passes to state 2 where the free game progresses like any other game. (No credits were awarded and, since the first two states were bypassed, no credits have been played.) The free game cannot be cashed out and switching to another game is not allowed until the free game has been played. If desired, other arrangements can be provided for handling free games.

State 6 is the hand paid jackpot/high tier win state. This state gets control whenever a prize over a certain amount is won. The credit meter is incremented while "HAND PAY CALL ATTENDANT" flashes on the screen. Then control is transferred to state 7.

State 7 is the cash out/print ticket state. This state gets control whenever the player elects to cash out. This state coordinates with the agent terminal (if provided), zeros the credit meter and prints the lottery ticket. States 6 and 7 may be combined in various ways for lottery applications. However, they are separate in the preferred embodiment of the invention to allow multiple gaming games in a single cabinet.

All states above are never game-dependent. Generally, state 8 is the spin/shuffle/deal state and state 9 is the evaluation state. However, any number of states may exist between state 3 and states 4-6. The supervisor in this instance gives control to state 8 when state 3 is done.

There are a number of 4-byte meters in CMOS RAM memory in addition to five mechanical meters (not shown). Some CMOS RAM memory meters apply to totals for all games, and some apply to only the totals for one game.

The following CMOS RAM memory meters are provided for each of the games in the lottery game terminal:

1. COIN IN meter: This represents the total value of all coins played and sent to the drop. This number is the sum of the number of quarters plus four times the number of Susan B. Anthony dollars. The COIN IN mechanical meter is the sum of the four COIN IN CMOS RAM memory meters.

2. CREDITS WON/JACKPOTS meter: This meter records the total of all credits won for this game including high tier wins but excluding free games. The corresponding mechanical meter contains the total of the four CMOS RAM memory meters divided by 10.

3. CREDITS PLAYED meter: This meter records the total credits bet on this game, excluding free games. The corresponding mechanical meter contains the total of the four CMOS RAM memory meters.

4. There are ten GAMES PLAYED meters for each game. The first meter counts the number of games played with a $.25 wager. The second meter counts the number of $.50 games, etc. There are meters for wagers from $.25 to $2.50. Any combination of credits and coin totaling $1.00 is recorded on the 4th meter. The grand total of all forty (4 × 10) GAMES PLAYED meters is recorded on the GAMES PLAYED mechanical meter.

5. FREE GAME meter: This meter contains the number of free games awarded by this game.

6. WINS meter: (Same as for gaming)
7. LOSSES meter: (Same as for gaming)

The following meters record exceptions and are not duplicated for each of the four games:

1. CASHOUT meter: This meter records the total amount cashed out (i.e. tickets printed). This meter represents all amounts in quarters, not dollars. The CASHOUT mechnical meter is the sum of the four CASHOUT CMOS RAM memory meters divided by 10.
2. COIN IN TILT
3. RESETS
4. DOOR OPENS
5. SUSAN B. ANTHONY DOLLARS meter: This meter counts the number of Susan B. Anthony dollars played on the game. The only purpose of this meter is to show the relative popularity of Susan B. Anthony dollars. It is not needed for any accounting purposes and it has no corresponding mechanical meter.

Internal RAM memory is allocated essentially as follows. All internal RAM locations are available for game-dependent use. Since all four games are using the same RAM locations for different purposes, the memory locations cannot be preserved when a player switches games. The memory locations are preserved between states during the play of one game.

External program memory (EPROMs) is allocated as follows:

1. 2000-32FF is for the supervisor program and library routines.
2. 3300+ is for the game-dependent code for the four games. The supervisor/library and the four games each occupy a different memory segment and are linked together accordingly.

External CMOS RAM memory is allocated as follows:

1. 1000-10FF belongs to the supervisor. The library routines including the interrupt handlers also use this area. The four games read and write this area when necessary for communication with the supervisor or the library routines.
2. 1100-11FF belongs to game #1. The game-dependent meters go here, along with last game information and anything else the game needs to store. Only game #1 can write into this area, except when all of CMOS RAM memory is cleared after a cold startup.
3. 1200-12FF is for game #2. It is used the same way game #1 uses 1100-11FF.
4. 1300-13FF is for game #3. It is used the same way #1 uses 1100-11FF.
5. 1400-14FF is for game #4. It is used the same way game #1 uses 1100-11FF.
6. 1500-15FF is available for any future use.
7. 1600-16FF is used for communications with the agent terminal.
8. 1700-17FF is the communications area for the video processor. This is the only area into which the video processor may write. The video processor can read any location in CMOS memory.

The supervisor and library routines are assembled using the following inputs:

1. MACRO file.
2. EQUATE file.
3. SUPERVISOR/LIBRARY code. This file contains all game-independent code including the library routines. It includes the majority of the code for all states except for the spin/shuffle/deal state and the evaluation state. This file contains as many functions as possible to eliminate the need for duplication in four different games. This code calls the game-dependent code at the appropriate times to allow the individual games to operate according to their special functions.

Each of the four games is assembled with the following inputs:

1. MACRO file as used for the supervisor.
2. WHICH GAME file. This file consists of only one line. The line is "WHICH SET n", where "n" is the game number from 1 to 4. The value of WHICH is used by the equate file and the game-dependent code to decide where to allocate external CMOS RAM memory and external program memory. This is the ONLY hard-coded game identification for each game.
3. EQUATE file as used for the supervisor.
4. GAME-DEPENDENT CODE. This file contains all of the code for the spin/shuffle/deal state and for the evaluation state. It also contains small subroutines for each of the other states and for special functions such as display meters, start up, etc.

The above assemblies produce five object files that must be linked together to produce one loaded direct access file. All references among these files are resolved by the linker. No hard-coded addresses are used in any of these files. However, all PUBLIC addresses in the game-dependent code appear at the beginning of the module and in the same order. This allows the supervisor to access all four games by adding a constant to the address for game #1.

The following are subroutine entry points in the game-dependent code that may be called by the supervisor.

1. POWER UP
2. STATE 0 (Called at beginning of state)
3. STATE 0 (Called when the first coin/credit is played)
4. STATE 1 (Called at beginning of state)
5. STATE 1 (Constantly called during "wait for coin/start" loop) This subroutine must not take more than a few msec. to execute.

6. STATE 2 (Called at beginning of state)
7. STATE 2 (Constantly called during "wait for start" loop) This subroutine must not take more than a few msec. to execute.
8. STATE 3
9. STATE 4
10. STATE 5
11. STATE 6
12. STATE 7
13. COIN RETURN. This routine is called whenever the escrow is returned to the player.

The supervisor jumps to the following game-dependent entry points as needed:

1. STATE 8 is given control after state 3 or after a reset during state 8. States 8, 9 and 10 may pass control to each other as required by the particular game.
2. STATE 9 is given control after a reset in state 9.
3. STATE 10 is given control after a reset in state 10.
4. LAST GAME display is done by game-dependent code. If there is an extra page of meters for a particular game, this entry point takes care of that also.
5. SELF-TEST jumps to this entry point for game-dependent self-test functions. The FLASH-CARD "reel strip" is the only example of this function in the exemplary embodiment of the invention.

The above entry points appear in the order listed for each game and are three bytes apart. Any entry points that are not needed by game-dependent code contain a return, a jump to reset code, or whatever is appropriate.

The following data tables/constants appear in the order indicated after the entry points for each game:

1. PROMN. 8 ASCII bytes identifying the game (for display in meter mode).
2. MAXBET. This byte is the maximum bet for this game. This is four (quarters) for all games in the exemplary embodiment of the invention. However, this scheme allows for combining other games with different MAXBET values into the same lottery game terminal.
3. MAXCO. Two bytes for the maximum pay without declaring a hand-paid jackpot/high-tier win.
4. MAXCOH. Two bytes (HEX) for the maximum cash-out without declaring a hand-paid jackpot/high-tier win.
5. SOFTBL. This is a variable length table of two-byte entries. Each entry is the row and column location on the screen of the upper left corner of the soft switches used by the game. A byte with a value of −1 signals the end of the table. The entries must be in the following order:
   1) Game-dependent switches if used
   2) ERASE (if used)
   3) GAME
   4) PAY TABLE
   5) START GAME
   6) CHANGE GAME
   7) Terminator byte (−1)

The video processor uses one software assembly with multiple files to build all test strings and to define the screen locations for these strings. Most strings are common to all games, though their locations on the screen are usually different. This generalization applies to the "WINNER PAID", message, the tilt messages, and the self test and meter display messages. Other strings, including the pay table strings and the text of the traveler may vary from game to game.

The universal text file reserves space for the row and column for each string for each game. For example, if there are three games, then six bytes are reserved before the string for the row and column values. Subroutines have been added to the video library to display strings stored in this format. By setting a pointer to the first row-column pair, the subroutine uses the current game number to load the correct row/column values and then advance the pointer to the first byte of the string. This system is also used for soft switches (light pen actuated display switches). A similar set of subroutines take care of four-byte entries like the row/column/attribute/length for the grower.

A separate file is used to define the string data for each game. This file is divided into two basic sections. The first section defines the row/column locations for all universal strings used by that game. This section includes traveler, grower, soft switches, etc.

The second section is used to define all strings that are unique to a particular game. String handling is accomplised by small "front end" subroutines that deal with new row/column definitions. Some gaming video programs use two or more screen addresses for the same string.

As for the game processor, there is a supervisor/library program and game program for each game. The supervisor/library takes care of power up, communication, self test, soft switches, tilts, meter display, and the writing of universal strings the play of the game. The individual video programs for each game take care of writing and updating the "card", displaying the pay table, and any game dependent pages during self test or meter display.

The text string assembly includes the following inputs:

1. MACRO file.
2. EQUATE file.

3. UNIVERSAL STRINGS file. This file contains the strings used by all games, including soft switch locations, traveler and grower texts, etc.

4. INDIVIDUAL GAME STRINGS files. These files contain the row column information for the universal strings, plus the game-dependent strings. There is no information in these files that indicates their game number. The order they are input to the assembler decides which one is game 1, etc.

The supervisor and library routines are assembled using the following inputs:

1. MACRO file.

2. EQUATE file.

3. SUPERVISOR/LIBRARY code. This file contains all game-independent code including the library routines. This code calls the game-dependent code at the appropriate times to allow the individual games to operate according to special game functions.

Each of the four games is assembled with the following inputs:

1. MACRO file.

2. EQUATE file.

3. WHICH GAME file. This file consists of only one line. The line is "WHICH SET n", where "n" is the game number from 1 to 4. The value of WHICH is used to decide where to ORG the beginning of the module and which labels to declare as PUBLIC. This is the ONLY hard-coded game identification for each game.

4. GAME-DEPENDENT CODE. These files contain all game-dependent code including special strings and writing and updating the "card".

One game processor assembly produces PUBLIC declarations to which the video processor may link. No executable code is produced. This assembly includes the following files:

1. MACRO FILE

2.GAME SIDE EQUATE FILE

3. A 1-line file consisting of "WHICH SET 0"

4. Files defining all game-dependent RAM locations for each game. These files include PUBLIC statements for locations needed by the video.

5. A file with PUBLIC statements for all game-independent locations needed by the video.

The above assemblies produce object files that must be linked together to produce one loaded direct access file. All references among these files are resolved by the linker. No hard-coded addresses are used in any of these files.

ALL PUBLIC addresses in the game-dependent code appear at the beginning of the module and in the same order. This allows the supervisor to access all four games by simply adding a constant to the address for game #1.

The described game software codes and assemblies are included with this application as a microfiche appendix to the application. The disclosure herein is considered sufficient to enable one skilled in the art to practice the present invention. The microfiche appendix is included to show exemplary game software - the software listing therein is not included as an exhaustive software listing. Accordingly, the scope of the invention should not be limited thereby.

The games provided by the lottery game terminal invention have color graphics, animation, on-screen player operating directions, and sound effects to attract, instruct, and inform game players. The audio-video components of the game add greatly to the realism, player involvement, and enjoyment of the video lottery game. Each game includes an attract mode, an information mode, a playing mode, and a collect winnings mode. In the exemplary embodiment of the invention, four different games are available for the player to choose from on each game terminal. These games are selected from a display menu (Figure 6) and include a flash card type game (Figure 7), a lotto type game (Figure 8), a reveal matrix type game (Figure 9), and any one of other various games selected for inclusion in the terminal, such as a state landmark-type game (not shown).

Players interact with the game through use of a light pen and push buttons, described above. Prizes are automatically accumulated and credited to a player until the player chooses to collect the outstanding prizes or if the winnings exceed a predetermined high tier amount, for example, $599.

Light pen and "soft" push button menu driven interaction between the player and the game are provided because they are easy to use and more "user friendly" than a keyboard or joystick. A "soft" push button is a displayed indicium (e.g. square 200 in Figure 6 and square 201 in Figure 7A) which, when selected by a player with a light pen, produces a defined game event, such as initiating game play. When compared to a touch screen, a light pen/"soft" push button game control mechanism is lower in cost and capable of more accurately selecting small areas of the video display, therefore providing higher resolution. More importantly, a light pen is far more reliable than a touch screen in actual lottery use.

In the exemplary embodiment of the invention, lottery games are played in any of a number of coin denominations, for example, $.50 or $1.00. Game play is generated randomly and does not involve any player skill. Thus, the game is a game of chance. The maximum prize awarded for any of the games is determined by a specific pay schedule for each game (Figures 7B-9B). Depending on the state lottery system used, the prize can range from a few thousand dollars to over a million dollars. Additionally, the prize can be paid in a lump sum or in installment payments.

The choice of games provided with the present invention allows relatively uncomplicated game play while providing a large degree of continuity with familiar scratch-off numbers games now in use. Additional

features, such as special drawings, wild symbols, doubling opportunities, bonuses, rollups, or progressives, can be incorporated in the present game terminal to increase excitement, stimulate sales, and expand a player base.

The games illustrated in Figures 7-9 are played as follows:

1) *Flash Card* - a three-in-a-row column or diagonal game, using a known 9-block tic-tac-toe layout. Numbers ranging from zero to nine flash on and off in the nine blocks. The numbers are played at random. The frequency of each number is inversely proportional to its prize value. There are several prize levels. Matching three identical numbers in any row, column, or diagonal, wins a prize. An exemplary flash card type game display is illustrated in Figure 7A; an exemplary pay schedule for a flash card type game is illustrated in Figure 7B.

2) *Lotto* - a 40 block "Pick 6" video lottery game. The game provides an opportunity to increase on-line game play while piggybacking game advertising and promotions costs. Game play win is based on the number of matches. An exemplary lotto type game is illustrated in Figure 8A; an exemplary pay schedule for a lotto type game is shown in Figure 8B.

3) *Reveal Matrix* - a video match game where the player selects a number of blocks in a 25-block matrix. This game is analogous to the "scratch-off" type lottery game. Player selection of a block with the light pen in effect "scratches-off" an obscuring video display plane to reveal a number or value plane hdden beneath. As each block is selected, a prize denomination is disclosed. If a specified number of blocks match (for example, three) the player wins that prize. Once the game is over, all blocks are disclosed so the player can see how he could have played to maximize his winnings. The location of prize denominations changes at random every time the game is played. An exemplary reveal matrix type game is illustrated in Figure 9A; an exemplary pay schedule is for a reveal matrix type illustrated in Figure 9B.

4) *Landmark* - a 5-symbol game, dealt at random, where each symbol shows a state landmark of the state wherein the lottery is located. The number of matching symbols determines the prize, i.e., two of a kind, three of a kind, four of a kind, or five of a kind. The frequency of landmark symbols varies the prize value.

Other games that may be provided in the present lottery game terminal include non-skill adaptations to sporting and adventure themes, such as golf, tennis, soccer, hockey, car racing, and mountain climbing. Diversionary games can take advantage of common themes, such as puzzles and mazes. Luxury games can use status symbols, such as gold, diamonds, furs, travel, or expensive cars, and the game can be played for such potential prizes. These video games can be provided as daily and weekly games with delayed drawings to be played in addition to the games themselves. Thus, the present invention offers limitless opportunities to develop and perfect game themes, subject only to the requirements of the game program be changed to implement the new games in the terminal.

For example, the following are other types of games that may be incorporated in the present invention:

1) *Number Match* - a number matching game where players select a five, six, or seven digit number, one digit at a time, left to right. A random number program generates a number with a comparable number of digits to compare with the player's number. Prizes are awarded based on the number of digits that are matched in a sequence.

2) *Add-up* - a variation of the 25-block matrix with an add-up theme. Players select a specified number of blocks. Each block discloses a number. Players win prizes based on a total accumulated score for the blocks selected. The higher the score, the higher the prize. During game play, the numbers selected are automatically totalled on the screen.

3) *Horse Race* - a horse race game involving real horse names and likely odds. A random number generator determines winners.

4) *Amusement Variations* - versions of popular amusement games where players play the actual game for a short period, but win prizes on a nonskill random basis.

5) *Sports Team* - a sports game, with the correct seasonal theme (i.e., football, baseball, basketball). A number of real or fictitious teams are shown on the screen, along with their opponents. The player selects a winner in each game. The random program picks the winner in each contest. Prizes are paid based on the player's total number of correct choices.

The foregoing was given for purposes of illustration and example. It is contemplated that various equivalent embodiments of the present invention will be suggested by the disclosure herein. For example, other types of games may be played at the present lottery game terminal. Additionally, the game housing and security features may be augmented or dispensed with as required by the game site and application. Therefore, the scope of the invention sould be limited only by the breadth of the claims.

CLAIMS

1. A game terminal, comprising:

a game processor for controlling operation of any selected one of a plurality of game terminal resident games;

memory means, coupled for communication with said game processor, for storing and retrieving under game processor control a plurality of game control programs, and an associated game-generated game event audit trail;

a video processor, coupled for communication with said game processor, for assembling under game

processor control a display image to accompany game operation;

a light pen, coupled for communication with said game processor, for selecting a game to be played, and for directing game play and game terminal operation; and

soft switch means in the form of light pen selectable indicia at predetermined display image locations, for effecting game selection, game play, and game terminal operation by setting said game processor to a corresponding game operation state, whereby player control of game selection, game play, and game terminal operation is provided.

2. The terminal of claim 1, further comprising display means, coupled to said video processor, for displaying said assembled display image and for displaying aid soft switch means indicium.

3. The terminal of claim 1, further comprising input/output means, coupled for communication with said game processor, for transferring signals between said game processor and a plurality of associated game terminal devices.

4. The terminal of claim 1, further comprising tone generator means coupled for communication with said game processor, for generating under game processor control selected sounds to accompany game operation.

5. A lottery game terminal, comprising:

microprocessor means for controlling game operation including:

a) game processor means for controlling operation of any selected one of a plurality of game terminal resident lottery games; and

b) a video processor, coupled for communication with said game processor for assembling under game processor control a display image to accompany said lottery game operation;

memory means, coupled for communication with said game processor, for storing and retrieving under game processor control, a plurality of lottery game control programs and for storing and receiving under game processor control an associated game-generated lottery game event audit trail;

input/output means, coupled for communication with said microprocessor means, for transferring signals between said microprocessor means and a plurality of lottery game terminal associated devices;

tone generator means, coupled for communication with said microprocessor means, for generating under game processor control selected sounds to accompany game operation;

a light pen, coupled for communication with said microprocessor means, for selecting a lottery game to be played and for directing lottery game play and lottery game terminal operation; and

soft which means in the form of light pen selectable indicia at predetermined display image locations for effecting lottery game selection, lottery game play, and lottery game terminal operation by setting said microprocessor means to a corresponding game operation state.

6. The terminal of claim 5, further comprising means coupled to said microprocessor means, for providing bidirectional communications between said terminal and a remotely located terminal supervisory system.

7. The terminal of claim 5, further comprising a plurality of sensor means, coupled to said microprocessor means via said input/output means, for providing accompanying signals corresponding to real time lottery game terminal events.

8. The terminal of claim 5, further comprising indicator means, coupled to said microprocessor means via said input/output means, for displaying lottery game events corresponding to a lottery game operation state.

9. The terminal of claim 5, further comprising meter means for storing and displaying game events and transactions.

10. The terminal of claim 5, further comprising a video display, coupled for communication with said microprocessor means, for displaying said assembled display image.

11. The terminal of claim 5, further comprising interface means, in communication with said micro-processor means via said input/output means, for coupling said terminal to a printer.

12. The terminal of claim 11, further comprising a printer coupled to said interface means.

13. A lottery game system including a plurality of video lottery game terminals, each lottery game terminal comprising:

a microprocessor module including:

a) a game processor for controlling operation of any selected one of a plurality of game terminal resident lottery games;

b) a video processor for assembling a display image to accompany lottery game operation;

c) a communications port for coupling said game processor to said video processor and over which game processor control signals are coupled to said video processor; and

d) a bidirectional serial interface for coupling said lottery game terminal to said lottery game system;

an input/output module, coupled to said microprocessor module, for transferring signals between said microprocessor module and a plurality of associated lottery game terminal sensors and indicators;

a tone generator module, coupled for communication with said microprocessor module, for generating under game processor control selected sounds to accompany game operation; and

meter means for storing and displaying an audit trail of lottery game terminal events and transactions.

14. The terminal of claim 13, further comprising:

a printer; and

a printer interface module, coupled between said printer and said microprocessor module, for transferring data and control signals therebetween.

15. The terminal of claim 13, further comprising a video monitor, coupled to said video processor, for displaying said assembled display image;

said video processor including:

a) means for generating under video processor control a video monitor vertical and horizontal synchronization signal;

b) means for storing and for generating under video processor control a plurality of image elements;

c) means for assembling under video processor control said image elements into a plurality of image display planes; and

d) means for converting signals corresponding to said assembled display image into a video signal for operating said video monitor.

16. The terminal of claim 13, said microprocessor module further comprising means for uniquely identifying said lottery game terminal in a lottery game system by decoding a unique lottery game terminal address provided to said lottery game terminal by said lottery game system.

17. In a microprocessor controlled lottery game terminal including a plurality of game terminal resident user selected lottery games, a method for playing a flash card type game, comprising:

displaying a game matrix;

continuously displaying and changing a random series of elements displayed within said display matrix;

selecting for static display a plurality of said elements at selected game matrix locations in any of a row, column, and diagonal configuration by means of a light pen;

declaring a winner when said selected display matrix locations contain matching elements; and

alternatively displaying upon selection thereof a game payout schedule.

18. In a microprocessor controlled lottery game terminal including a plurality of game terminal resident user selected lottery games, a method for playing a lotto type game, comprising:

displaying a game matrix;

selecting a plurality of disc game matrix locations in random sequence;

displaying an element at each selected location;

declaring a winner when a selected number of elements at said selected game matrix locations match; and

alternatively displaying upon selection thereof a game payout schedule.

19. In a microprocessor controlled lottery game terminal including a plurality of game terminal resident user selected lottery games, a method for playing a reveal matrix type game, comprising:

displaying a game matrix;

selecting a plurality of game matrix locations with a light pen;

revealing an element associated with each selected location;

declaring a winner when a selected number of elements at selected matrix locations match;

disclosing elements contained at each location in the matrix upon conclusion of game play;

randomly changing element location within said matrix; and

alternatively displaying upon selection thereof a game payout schedule.

20. A terminal substantially as hereinbefore described with reference to and as illustrated in the accompanying drawings.

Printed in the UK for HMSO, D8818935, 3/85, 7102.
Published by The Patent Office, 25 Southampton Buildings, London, WC2A 1AY, from which copies may be obtained.

EVIDENCE APPENDIX F

COPY OF RITTMASTER U.S. PATENT PUBLICATION NO. 2002/0023010

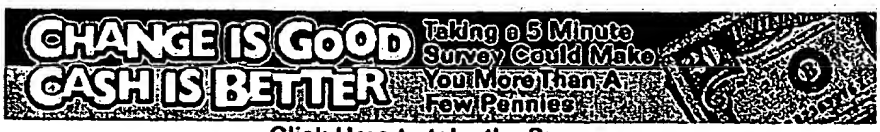
EVIDENCE APPENDIX G

COPY OF LOTTOBOT, HTTP://LOTOBOT.NET

Click Here to Win $50,000!

LottoBot

Click Here to Win $50,000!



Click Here to take the Survey

Want to get your personal lottery results by email? Try LottoBot -- It's FREE!

Here's how it works: You enter your lottery ticket numbers and email address(es) and LottoBot checks your ticket numbers with the winning numbers and emails your results right after the draw! LottoBot is great for group players: you can have your groups' results emailed to each person individually! LottoBot sends results for U.S. and Canadian lotteries including Powerball, Big Game, and Lotto 6/49, plus U.K. & Ireland National Lotteries and Australia!

There is no financial obligation to LottoBot ever and you may cancel service whenever you like. Also you will never receive unsolicited email (spam) from using LottoBot. To sign up first go to the Lotto Menu.

Looking for latest/past winning numbers? Check the Archive
Got a pager? LottoBot can page your results to you when you're on the road!

HotCard VISA The First True Internet Visa

LottoBot Menu
Lotto Results by Email
Jackpot Alerts by Email
Winning Numbers Archive
Message Boards
Cancel or Change Email
Help
LottoBot Raves!
Web Guide
Affiliate Program

1000 REASONS

STOP

PLUS lotto

LottoBot has 3878 email clients!

Want to play online? Try THE Internet lottery, PLUS Lotto.
PLUS Lotto even has online instant scratch and win games!

Have any systems for picking numbers? If so you can use LottoBot for testing:
You can tell LottoBot to email you when you have picked a winning combination!

Grab Gator! Software fills out online forms automtically. Download Gator Free!

Whole Lotta Lottos!

Here's just *some* of the lotteries that LottoBot currently sends results for ...

Australia : Saturday Lotto, Oz Lotto, Powerball, Keno

Canada : Lotto 649, Lotto Super 7, Atlantic Choice, Atlantic Pik 4, BC 49, BC Daily 3, Ontario 49, Lottario, Ontario Pick 3, Ontario Keno, Quebec 49, Banco, La Quotidienne 4, La Quotidienne 3, Prairie Keno, Pogo, Western Pick 3, (Lotto 6-49, Lotto 6/49)

Ireland : Irish Lotto

New Zealand : Lotto, Strike

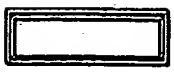
U.K. : National Lottery, Thunderball

U.S.A. : Big Game, Cash 4 Life, Powerball, Tri-State Megabucks, Wild Card, Arizona Lotto, California Super Lotto, Colorado Lotto, Connecticut Lotto, Delaware Lotto, DC Quick Cash, Florida Lotto, Georgia Lotto, Georgia Big Game, Idaho Fast 5, Illinois Lotto, Illinois Big Game, Indiana Hoosier Lotto, Iowa Daily Cash Game, Kansas Cash, Kentucky Lotto, Louisiana Lotto, Maryland Lotto, Maryland Big Game, Massachusetts Mass Millions, Massachusetts Megabucks, Massachusetts Big Game, Michigan Lotto, Michigan Big Game, Minnesota Gopher 5, Missouri Lotto, Montana Cash, Nebraska Pick 5, New Jersey Lotto, New Mexico Roadrunner Cash, New York Lotto, Ohio Super Lotto, Oregon Megabucks, Pennsylvania Super 6 Lotto, Rhode Island Roll Down, South Dakota Cash, Texas Lotto Texas, Virginia Lotto, Virginia Big Game, Washington Lotto, West Virginia Cash 25, Wisconsin Megabucks, Wisconsin Supercash

Plus many, MANY more! ... And new lottos are being added all the time!

Please send comments to email@lottobot.net

LottoBot is sponsored by:



Copyright © 1999 LottoBot Inc. All rights reserved.

Need A Loan?
New Home Loans Refinance Debt Consolidation 2nd Mortgage
click here for the lowest rates!

LottoBot Lotto Menus

Canada

U.S.A.

Australia & New Zealand

U.K. & Ireland

Copyright © 1999-2000 LottoBot Inc. All rights reserved.

LottoBot

Click Here!

LottoBot Lotto Menu : U.S.A.

Multi-State : Powerball, Big Game, Rolldown, Wild Card

Arizona : The Pick, Fantasy 5, Pick 3
California : SuperLotto Plus, Fantasy 5, Daily 3
Colorado : Lotto, Cash 5
Connecticut : Lotto, Cash 5, Midday Play 4, Play 4, Midday Play 3, Play 3
Delaware : Lotto, Midday Play 4, Play 4, Midday Play 3, Play 3
D.C. : Quick Cash, Hot Five, Midday Pick 4, Pick 4, Midday Pick 3, Pick 3
Florida : Lotto, Fantasy 5, Mega Money, Play 4, Cash 3
Georgia : Lotto, Fantasy 5, Cash 4, Midday Cash 3, Cash 3
Idaho : Fast 5
Illinois : Lotto, Little Lotto, Midday Pick 4, Pick 4, Midday Pick 3, Pick 3
Indiana : Hoosier Lotto, Lucky 5, Daily 4, Daily 3
Iowa : Daily Cash Game, Pick 3
Kansas : Cash, Pick 3
Kentucky : Lotto, Cash 5, Midday Pick 4, Pick 4, Midday Pick 3, Pick 3
Louisiana : Lotto, Cash Quest, Pick 4, Pick 3
Maine : see Tri-State
Maryland : Lotto, Cash In Hand, Midday Pick 4, Pick 4, Midday Pick 3, Pick 3
Massachusetts : Millions, Megabucks, Cash, Numbers
Michigan : Lotto, Rolldown, Keno, Midday Daily 4, Daily 4, Midday Daily 3, Daily 3
Minnesota : Gopher 5, Daily 3
Missouri : Lotto, Show Me 5, Pick 3
Montana : Cash
Nebraska : Pick 5
New Hampshire : see Tri-State
New Jersey : Lotto, Cash 5, Lotzee, Pick 4, Pick 3
New Mexico : Roadrunner Cash
New York : Lotto, Local Lotto, Take 5, Win 4, Numbers, Pick 10
Ohio : Super Lotto Plus, Buckeye 5, Pick 4, Pick 3
Oregon : Megabucks
Pennsylvania : Super 6 Lotto, Cash 5, Big 4, Daily 3
Rhode Island : Roll Down, Pick 4
South Dakota : Cash
Texas : Lotto, Cash 5, Million, Pick 3
Tri-State : Megabucks, WinCash, Pick 4, Pick 3
Vermont : see Tri-State
Virginia : Lotto, Midday Cash 5, Cash 5, Midday Pick 4, Pick 4, Midday Pick 3, Pick 3
Washington : Lotto, Quinto, Lucky for Life, Daily 3, Keno
West Virginia : Cash 25, Daily 4, Daily 3
Wisconsin : Megabucks, Supercash, Pick 4, Pick 3

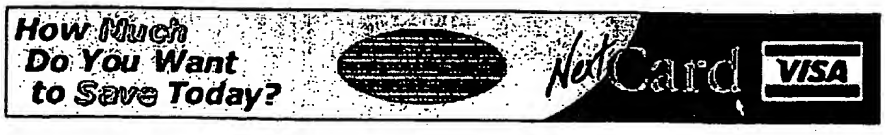
Powerball and Big Game : Please be aware there is only ONE Powerball and only

ONE Big Game for the whole U.S. There are no separate Powerball and Big Game draws for each state. This is why there are no Powerball and Big Game links for each state. The Powerball and Big Game links are at the top of the list.

If you do not find your lotto in the list please send a note to email@lottobot.net and it will be added!

Copyright © 1999-2000 LottoBot Inc. All rights reserved.

LottoBot



LottoBot Jackpot Alert Menu

Canada

U.S.A.

Australia & New Zealand

U.K. & Ireland

Copyright © 1999-2000 LottoBot Inc. All rights reserved.

LottoBot

Click Here!

LottoBot Jackpot Alert Menu : U.S.A.

Multi-State : Powerball, Big Game, Wild Card

Arizona : Lotto
California : SuperLotto Plus
Colorado : Lotto
Connecticut : Lotto
Delaware : Lotto
D.C. : n/a
Florida : Lotto
Georgia : Lotto
Idaho : n/a
Illinois : Lotto
Indiana : Hoosier Lotto
Iowa : n/a
Kansas : Cash
Kentucky : Lotto
Louisiana : Lotto
Maine : see Tri-State
Maryland : Lotto
Massachusetts : Millions, Megabucks
Michigan : Lotto
Minnesota : n/a
Missouri : Lotto
Montana : n/a
Nebraska : n/a
New Hampshire : see Tri-State
New Jersey : Lotto
New Mexico : n/a
New York : Lotto
Ohio : Super Lotto Plus
Oregon : Megabucks
Pennsylvania : Super 6 Lotto, Cash 5
Rhode Island : n/a
South Dakota : n/a
Texas : Lotto
Tri-State : Megabucks, WinCash
Vermont : see Tri-State
Virginia : Lotto
Washington : Lotto, Quinto
West Virginia : n/a
Wisconsin : Megabucks

Powerball and Big Game : Please be aware there is only ONE Powerball and only

ONE Big Game for the whole U.S. There are no separate Powerball and Big Game draws for each state. This is why there are no Powerball and Big Game links for each state. The Powerball and Big Game links are at the top of the list.

If you do not find your lotto in the list please send a note to email@lottobot.net and it will be added!

Copyright © 1999-2000 LottoBot Inc. All rights reserved.

LottoBot

dash power shopping

LottoBot Archive

Canada

U.S.A.

Australia & New Zealand

U.K. & Ireland

Copyright © 1999-2000 LottoBot Inc. All rights reserved.

LottoBot

LottoBot Archive : U.S.A.

Multi-State : Powerball, Big Game, Cash 4 Life, Wild Card

Arizona : The Pick, Fantasy 5, Pick 3
California : Super Lotto, Fantasy 5, Daily 3
Colorado : Lotto, Cash 5
Connecticut : Lotto, Cash 5, Midday Play 4, Play 4, Midday Play 3, Play 3
Delaware : Lotto, Midday Play 4, Play 4, Midday Play 3, Play 3
D.C. : Quick Cash, Hot Five, Midday Pick 4, Pick 4, Midday Pick 3, Pick 3
Florida : Lotto, Fantasy 5, Mega Money, Play 4, Cash 3
Georgia : Lotto, Fantasy 5, Cash 4, Midday Cash 3, Cash 3
Idaho : Fast 5
Illinois : Lotto, Little Lotto, Midday Pick 4, Pick 4, Midday Pick 3, Pick 3
Indiana : Hoosier Lotto, Lucky 5, Daily 4, Daily 3
Iowa : Freeplay Replay, Daily Cash Game, Pick 3
Kansas : Cash, Pick 3
Kentucky : Lotto, Cash 5, Midday Pick 4, Pick 4, Midday Pick 3, Pick 3
Louisiana : Lotto, Cash Quest, Pick 4, Pick 3
Maine : see Tri-State
Maryland : Lotto, Cash In Hand, Keno, Midday Pick 4, Pick 4, Midday Pick 3, Pick 3
Massachusetts : Millions, Megabucks, Cash, Numbers
Michigan : Lotto, Rolldown, Keno, Midday Daily 4, Daily 4, Midday Daily 3, Daily 3
Minnesota : Gopher 5, Daily 3
Missouri : Lotto, Show Me 5, Pick 3
Montana : Cash
Nebraska : Pick 5
New Hampshire : see Tri-State
New Jersey : Lotto, Cash 5, Lotzee, Pick 4, Pick 3
New Mexico : Roadrunner Cash, Mega Match 4
New York : Lotto, Local Lotto, Take 5, Win 4, Numbers, Pick 10
Ohio : Super Lotto, Buckeye 5, Pick 4, Pick 3
Oregon : Megabucks
Pennsylvania : Super 6 Lotto, Cash 5, Big 4, Daily 3
Rhode Island : Roll Down, Pick 4
South Dakota : Cash
Texas : Lotto, Cash 5, Million, Pick 3
Tri-State : Megabucks, WinCash, Pick 4, Pick 3
Vermont : see Tri-State
Virginia : Lotto, Midday Cash 5, Cash 5, Midday Pick 4, Pick 4, Midday Pick 3, Pick 3
Washington : Lotto, Quinto, Lucky for Life, Daily 3, Keno
West Virginia : Cash 25, Daily 4, Daily 3
Wisconsin : Megabucks, Supercash, Pick 4, Pick 3

Powerball and Big Game : Please be aware there is only ONE Powerball and only

ONE Big Game for the whole U.S. There are no separate Powerball and Big Game draws for each state. This is why there are no Powerball and Big Game links for each state. The Powerball and Big Game links are at the top of the list.

If you do not find your lotto in the list please send a note to email@lottobot.net and it will be added!

Copyright © 1999-2000 LottoBot Inc. All rights reserved.

Please visit our sponsors.

Click Here to Visit our Sponsor

LottoBot Message Boards

Canada

U.S.A.

Australia

U.K. & Ireland

- **LottoBot Home**

Click Here

LottoBot Message Boards : U.S.A.

Multi-State : Powerball, Big Game, Cash 4 Life, Wild Card

Arizona : The Pick, Fantasy 5, Pick 3
California : Super Lotto, Fantasy 5, Daily 3
Colorado : Lotto, Cash 5
Connecticut : Lotto, Cash 5, Midday Play 4, Play 4, Midday Play 3, Play 3
Delaware : Lotto, Midday Play 4, Play 4, Midday Play 3, Play 3
D.C. : Quick Cash, Hot Five, Midday Pick 4, Pick 4, Midday Pick 3, Pick 3
Florida : Lotto, Fantasy 5, Play 4, Cash 3
Georgia : Lotto, Fantasy 5, Cash 4, Midday Cash 3, Cash 3
Idaho : Fast 5
Illinois : Lotto, Little Lotto, Midday Pick 4, Pick 4, Midday Pick 3, Pick 3
Indiana : Hoosier Lotto, Lucky 5, Daily 4, Daily 3
Iowa : Daily Cash Game, Pick 3
Kansas : Cash, Pick 3
Kentucky : Lotto, Cash 5, Midday Pick 4, Pick 4, Midday Pick 3, Pick 3
Louisiana : Lotto, Cash Quest, Pick 4, Pick 3
Maine : see Tri-State
Maryland : Lotto, Cash In Hand, Keno, Midday Pick 4, Pick 4, Midday Pick 3, Pick 3
Massachusetts : Millions, Megabucks, Cash, Numbers
Michigan : Lotto, Cash 5, Keno, Midday Daily 4, Daily 4, Midday Daily 3, Daily 3
Minnesota : Gopher 5, Daily 3
Missouri : Lotto, Show Me 5, Pick 3
Montana : Cash
Nebraska : Pick 5
New Hampshire : see Tri-State
New Jersey : Lotto, Cash 5, Lotzee, Pick 4, Pick 3
New Mexico : Roadrunner Cash
New York : Lotto, Local Lotto, Take 5, Win 4, Numbers, Pick 10
Ohio : Super Lotto, Buckeye 5, Pick 4, Pick 3
Oregon : Megabucks
Pennsylvania : Super 6 Lotto, Cash 5, Big 4, Daily 3
Rhode Island : Roll Down, Pick 4
South Dakota : Cash
Texas : Lotto, Cash 5, Million, Pick 3
Tri-State : Megabucks, WinCash, Pick 4, Pick 3
Vermont : see Tri-State
Virginia : Lotto, Midday Cash 5, Cash 5, Midday Pick 4, Pick 4, Midday Pick 3, Pick 3
Washington : Lotto, Lucky for Life, Daily 3, Keno
West Virginia : Cash 25, Daily 4, Daily 3, Keno
Wisconsin : Megabucks, Supercash, Pick 4, Pick 3

If you do not find your lotto in the list please send
a note to email@lottobot.net and it will be added!

Copyright © 1999 LottoBot Inc. All rights reserved.

LottoBot

COUPONS

Win a dream trip for TWO

LottoBot Cancel or Change

You do not have to use this form to unsubscribe or make changes. You can do so much easier by clicking the the unsubscribe or change link contained in your email from LottoBot.

This form allows you to cancel or change your LottoBot subscription. To cancel your LottoBot subscription please enter your email address below *and* select a lotto, then click the "Submit" button. To change your LottoBot subscription please follow the cancel procedure then make a new submission as you did before by following steps 1 through 4 on the submission entry form.

Your email address:

Please select an action:

- ◉ **Cancel lotto results email**
- ○ **Cancel jackpot alert email**
- ○ **Change email address**

If you are changing your email address please enter your new address below:

New email address:

Please select the lotto you want cancel or change.
After you've made your selection click the "Submit" button.

please select one Submit

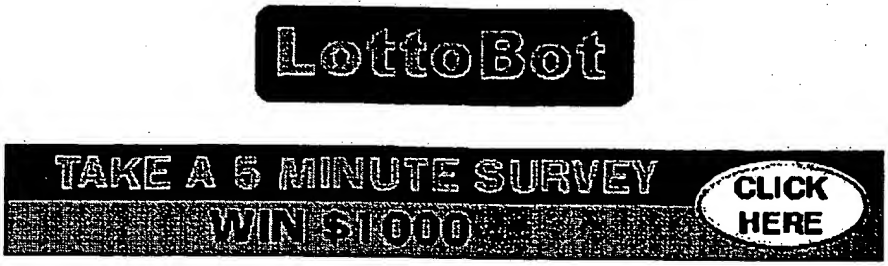
please select one Submit

please select one Submit

please select one Submit

Clear Form

Copyright © 1999-2000 LottoBot Inc. All rights reserved.



LottoBot Help

If you've made a submission to LottoBot but you're not receiving email results it's most likely because the email address you submitted is not valid. You may have just had a typo in you're email address. If you like you may make your submission to LottoBot again.

Another reason could be that you made your submission after the email results have been sent. In this case you will begin receiving your results next draw.

Finally, if you made a submission and selected a day other than the actual draw day then you will not receive your results.

If you are not receiving your results and you are sure it is not for any of the above reasons please send an email to help@lottobot.net stating which lotto results you are not receiving. Please include either your LottoBot Confirmation message you received after signing up or a copy of the last email results you received.

Copyright © 1999-2000 LottoBot Inc. All rights reserved.

Please visit our sponsors.

Click Here to Visit our Sponsor

LottoBot Web Guide

Categorized collection of recommended Web sites
great sites will be added each week!

- Entertainment
- Fun Pages
- Lottery Sites
- News
- Personal Finance
- Sports
- Useful Sites
- Web Building

Want to suggest a site be added to LottoBot Web Guide?
Please submit site URL(s) for review!

- LottoBot Home

Action canceled

Internet Explorer was unable to link to the Web page you requested

LottoBot Affiliate Sign-Up

(already signed up? click here to login)

Earn $0.25 for each person you refer to LottoBot that signs up for lotto results by email!

To join the LottoBot affiliate program please complete the following form. Checks will be mailed at the end of each month to affiliates that have earned at least $25.00 in LottoBot referral sign-ups. Affiliates with less than $25.00 at the end of the month will have their earnings carried over into the next month.

Your personal information will NOT be given to any third parties.

Company:		not required
Your URL:		if available
Email Contact:		
Checks payable to:		
Address:		
City:		
State/Province:		
Zip/Postal Code:		
Choose a password:		
Retype password:		

Submit Discard

NOTE: Your submission of this form and participation in the LottoBot Affiliate Program indicates that you have read and agree to be bound by the terms and conditions set forth in the LottoBot Affiliate Program's Terms and Conditions.

Copyright © 1999-2000 LottoBot Inc. All rights reserved.

Please visit our sponsor.

LottoBot Raves!

Yahoo! Site of The Day, June 27 1999
CGO Cable WAVE Information Page, May 14 1999

Look what people are saying about LottoBot! :

"You're website gave me the push to go out and consistently play the same favorite numbers in all the Florida games. 2 short weeks later, (on Christmas!) I received an email from your site stating I had hit all five numbers on Fantasy 5. $14,000 was a great Christmas gift."
- B.B., Florida, USA

"You guys have my #1 vote for favorite websites. A very satisfied subscriber."
- G.C., Ontario, Canada

"I think your service is great."
- G.L., Canada

"I seemed to miss the numbers when they were published in the paper and I almost never brought them to the store where I could have them checked by the clerk. Now, however, I can look to see if I have won right here in my own home. I would like to thank you once again for this valuable and practical service."
- L.B., Ontario, Canada

"I love the idea of your service!"
- J.F., New York, USA

"I use your service daily and enjoy it very much! Thanks"
- G.B.

"What a great idea! I have signed up for your service."
- J.S., B.C., Canada

"I want to use LottoBot for California Super Lotto on a regular basis."
- R.R., California, USA

"I can't tell you how convenient it is having this service ... Thanks again for the great service!"
- D.R., Ontario, Canada

"As a new subscriber to your service I find it awesome that the lotto results are emailed right to my computer. It is a great service ... I am starting to send your address to everyone in my mailing list."
- G.J., Newfoundland, Canada

"Now I don't have to buy the newspaper to find out my lottery results. Every time I buy a ticket I put the numbers in the computer and LottoBot notifys me."
- AOL member

"I like your service ... It is nice to have the numbers instantly after the draw."
- R.W., Ontario, Canada

"It is amazing! How do you get all the numbers from around the globe? You beat the news channels and papers. Great Job!"
- T.M., New Jersey, USA

"Great site I use it all the time. I would be lost with out it."
- J.S., Pennsylvania, USA

"Hey guys keep up the good work. It really is a convenience to receive my lottery results at my personal computer. Keep up the good work!"
- S.F., Maryland, USA

"Thank you for the results of lotto. This is great. I will tell my friends about this service."
- C.C., Illinois, USA

"The service is great and I love it, thank you."
- AOL member

Copyright © 1999-2000 LottoBot Inc. All rights reserved.

EVIDENCE APPENDIX H

COPY OF LUCIANO ET AL. U.S. PATENT NO. 6,168,521

EVIDENCE APPENDIX I
COPY OF SGI INSIGHTS, SCIENTIFIC GAMING INTERNATIONAL, VOL. 1, ISSUE NO. 5 (JANUARY 1999)

SGI INSIGHTS

A Publication of Scientific Games International — Providing Lottery Products, Integrated Systems and Support Services Worldwide

DEC/JAN 1998/99

VOLUME 1
ISSUE 5

Customer Satisfaction Teams: *Response to an Industry Trend*

The industry trend toward smaller games and faster turnaround times has done more than help add dollars to a lottery's bottom line. It has also added to a supplier's pre-press workload.

This year Scientific Games will produce more than 1,000 games, compared to 280 games in the years that predate the multiple game strategy.

"Part of the reason we transitioned to *Customer Satisfaction Teams (CSTs)* was to address the industry's fundamental shift from long-running games to smaller games and faster turnarounds," says Jay Jordan, Scientific Games' Manager of Corporate Reengineering. "This strategic shift has put a tremendous burden on the pre-press process, because the same amount of pre-press work is required whether a game has a print quantity of 2 million or 200 million."

Under the old system, Scientific Games personnel were grouped according to department (i.e., account services, graphics, production control, programming and pricing).

The way it used to work was the account services department would work on a game. Then it would go to graphics; then would re-emerge in account services; and then onto a completely different department called production control.

"As a game moved from department to department, someone else would have to pick up the pieces and fully understand the nuances of what had happened up to that point, which was not always easy," says Jordan. "What we had before teams was a lot of hand-offs, which worked well when fewer games were being produced. But now that the environment is vastly different, 'procedural status quo' simply is no longer the most efficient and effective way to serve our customers."

Now, the departments are gone. *The teams* are now the departments. No longer do account services people sit together in one room, graphics people in another, and production control in still another. Now they all work together side-by-side in the same room.

"You no longer hear, *We're in graphics and you're in production control.* Instead, you hear, *We're part of Team Equinox, Synergy, Teamworks, Player's Club and Globetrotters,*" says Jordan. "We're creating a partnership, a team, and the customer is part of that team.

"In the past, every department did their own thing, and once they finished their part, the game became somebody else's responsibility. But with a team approach, the feeling is, *This is our baby. We're not only held accountable, we want to be held*

TEAM EQUINOX

SYNERGY

TEAMWORKS

THE PLAYER'S CLUB

GLOBETROTTERS

continued inside, please see Customer Satisfaction Teams

Daily Race Game™ Off and Running in Delaware

On November 18, the Delaware Lottery held its first televised launch of the *Daily Race Game*™, a computer-animated horse racing game the Lottery hopes will boost its on-line sales.

Renamed *Run for the Money* by the Delaware Lottery, this new game gives players the opportunity to choose 3 horses from a field of 12. Players win by matching their picks in *exact order* or *any order*. Tickets cost $2. Prizes range from $2 to $580. Odds of winning range from 1:4 to 1:1,320.

Exact Order Ticket	Odds of winning	Prize
Match 1st	1:12	$5
Match 1st and 2nd	1:132	$30
Match 1st, 2nd and 3rd	1:1,320	$580
Any Order Ticket		
1 of 3 wins race	1:4	$2
2 of 3 finish 1st and 2nd	1:22	$7
3 finish 1st, 2nd and 3rd	1:220	$82

continued inside, please see Daily Race Game™

Reproduction or distribution of information contained herein is prohibited. © 1998 Scientific Games.

From Our Perspective

by Jim Kennedy,
SGI Regional Director

To quote Bob Dylan, "*The times..they are a changin'.*"

As an industry, we have our work cut out for us as we move sales higher from here. I believe this to be true because a new retail paradigm is fast emerging, one that demands a new approach to selling consumer products in high-volume, high-tech retail environments. From my perspective, our ability to penetrate these environments will be a key factor whether instant sales growth can be sustained over the next 5 to 10 years. And this effort will require a cooperative partnership between lotteries and suppliers.

In today's new retail paradigm, consumer products companies are forming closer business partnerships with their distributors, integrating their respective technologies to produce greater efficiencies and value for both retailer and consumer. Procter & Gamble, for example, now uses the Internet to track its products on a daily basis, instead of relying on once-a-week sales estimates from store managers. P&G is able to do this, having integrated its systems with those of its major business partners, such as Wal-Mart.

Yet, at a time when lotteries are looking to penetrate more deeply into supermarkets and other multi-lane retail environments, the industry appears to be distancing itself from a solution. Let me explain.

The industry's primary emphasis continues to be on receiving low-cost tickets. And low-cost tickets are exactly what lotteries are getting. While the economics of this strategy may make sense in a growing market, what happens when sales flatten or turn south (as they appear to be doing)? Where and to whom do lotteries turn?

If history is a gauge, they will turn to marketing and the next program to reinvigorate sales. If they're unable to find a solution internally, they will then look externally. But what lotteries risk finding in their external search — assuming their emphasis on low-cost tickets continues — are fewer programs because, quite frankly, there will be fewer suppliers with the financial means or interest to develop them. What's more, suppliers that are left standing will have abandoned their investments in R&D and, instead, invested where the industry has told them: In equipment that produces low-cost tickets. Untangle the results of this purchasing strategy and what you find are lotteries saving $2 per thousand on a product that generates $250 per thousand when sold.

Consider this: Lotteries make money selling tickets, not purchasing them. Assuming you accept this notion — as we move forward from here — isn't it in our collective, long-term best interests to begin shifting the emphasis away from that which produces the least value (purchasing tickets), toward that which produces the greatest value (selling tickets)?

Imagine a procurement that is structured on the ability to generate sales and revenues. In this environment, suppliers would have as much at stake in a lottery's success as the lottery itself. In fact they would have more at stake, given the profit margin on a game is approximately 100 times greater for a lottery than a supplier. Suppliers would also increase their investments in systems, programs, research, games and cost control. They could then spread these costs over many lotteries, thereby delivering these mission-critical functions to individual lotteries at lower costs.

Scientific Games is committed to the long-term development of the lottery business. That is why we have continually made important investments in these mission-critical functions (*SGI-NET™*, *SciScan Technology®*, *Winner's Choice™*, and the *Daily Race Game™*, to name a few), with more investments to come in 1999.

The future of our industry depends on the complex integration of marketing, systems and operations — all working together to produce and sell that simple moment of entertainment we call *lottery*. Don't waste the next four years of a contract wrangling over fractions of a penny on purchasing; instead, let us move into a cooperative arrangement that generates real revenues.

Customer Satisfaction Teams:

continued from front page

accountable. This is ours; this is our work — from beginning to end."

Part of the philosophy behind 'teams' is that customers are better served when people are able to focus on a core group of customers on a consistent, everyday basis. As the theory goes, once team members are in sync with each other — as well as with their customers — response and turnaround times will be faster; internal bottlenecks will be eliminated; errors will be reduced; communications and customer recommendations will be better. Decisions will also be better because, as Jordan puts it: "Two minds are always better than one."

The new team philosophy also encourages cross-training among members. The thinking is, the better each team member understands what the others do, the better he can serve his team, his customers, and offer recommendations that contribute to the whole.

The Customer Satisfaction Teams are only one element of a sweeping, company-wide reengineering initiative designed to: (1) accommodate more games with smaller print quantities; (2) deliver error-free games and deliverables; (3) accelerate cycle time from approved artwork and prize structure to date of shipment; and (4) respond quicker to customer needs.

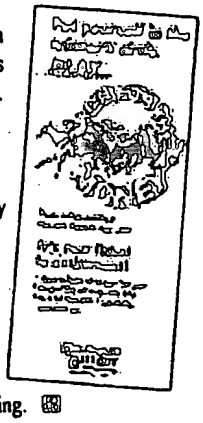
Jordan is quick to point out that just as the process improvement initiative took time to develop and evolve (it has its roots in 1995), so, too, will it take time for each CST to become fully efficient.

"This initiative will continue to evolve and we will continually modify it to best serve the customer," says Jordan. "Are we going to be 100% flawless out of the gate? Absolutely not. In the final analysis, however, what we want to cultivate is a process that is so much better than any other process ever developed that customers won't want to do business any other way."

Daily Race Game™

continued from front page

As a unique feature, a 9-digit Winner's Circle Number — pre-printed on every ticket — gives players an opportunity to win $2,500 in a second chance drawing. One winner is chosen daily from among all players participating in that night's race. Odds of hitting the Winner's Circle Number depends on the number of tickets sold. The $2,500 is guaranteed daily.



Run for the Money races are simulcast every Monday, Wednesday and Friday on the state's public broadcasting system (PBS), as well as on certain radio stations throughout the state.

The Delaware Lottery plans to increase its advertising support of the game in the weeks to come, which will include television, radio, outdoor, newspaper and point-of-sale advertising.

The Daily Race Game™ is a joint venture product of Scientific Games and TeleCom Productions.

RESEARCH REVIEWS

New Analytical Tool Measures Seasonality

by Deborah Sawyer, SGI Research Manager

Memo to lottery marketing department: *As you know, the "Lucky Bucks" ticket launched in May outsold the "Money Mania" ticket launched in August. To update you, we are now analyzing why this happened, specifically looking at how differences in prize structures and launch dates may have affected sales. We'll issue our findings next week.* —Research Department.

Lotteries conduct these types of post analyses all the time. "Why" a game outsold another is more important than simply knowing that it did. The answers enable lotteries to reuse the popular features on future games and avoid repeating the mistakes that may have led to poor sales.

There are many factors to consider in a post analysis, one being 'seasonality.' Some seasons correlate with sales peaks, others with sales valleys. To properly assess seasonality, Scientific Games has computed seasonal indices for each of its US lottery customers. SGI Account Executives now use this analytical tool for game planning, order quantity determination, and sales analysis. These indices — which are based on 5 years of weekly sales data for each US lottery — are essential for getting a 'true and accurate picture' of a game's appeal.

A note of caution: To determine seasonal affect on sales, first factor out any underlying trend. Upward or downward underlying trends, if not factored out, will lead to computation of erroneous seasonal factors.

DOCKSIDE INSIGHTS

by Jim Culver

"You're hired! Start work Monday as our new Marketing Director and attend all executive staff meetings. However, do not speak at these meetings. Do not express an opinion at any time during the first 6 months of your employment. Make no significant decisions during that period."

Those were my instructions when I first entered the lottery industry. You've got to be kidding. I was loaded with ideas. I could be helpful. I could be a contributor, but I was muzzled. No one wanted to hear my thoughts or my opinions, because I knew so little about the lottery.

I did as I was told. I worked hard, attended meetings and never uttered a word. My tongue bled from biting it, but a curious thing happened. Since I could not talk, even to venture a brilliant (or so I thought) idea, I found myself listening more and learning faster.

One of the first things I learned was that my ideas were not that brilliant. In fact many of them had already been attempted and some had previously been declared disasters. So much for that! I was spared considerable embarrassment by my forced silence, and I learned the reason for many of the current marketing practices.

But one day, a curious thing happened. I was sitting quietly in a meeting when suddenly someone asked my opinion. I looked up to see the entire group around the conference table looking at me, expectantly. They actually wanted to hear what I had to say. I mumbled a few innocuous thoughts and then retreated to the sanctity of my silent cocoon.

But the ice was broken. Free at last! I could speak! Someone actually cared what I thought. I could express ideas, and someone would listen. Now that I knew a little more about the complexities of the lottery industry, perhaps I could begin to make some meaningful contributions.

In retrospect, it was a painful, but effective experience. One cannot talk and learn at the same time. It's impossible. Knowledge is wonderful trade-off for pontification and I recommend it to all new lottery employees, even Directors. Look before you leap. Listen before you speak. Learn before you lecture. It saves everyone time and makes meetings more productive.

But Michael Jones disagrees. The former Illinois Lottery Director and current consultant chastises vendors in his September IGWB column, for "resisting challenges to current marketing orthodoxy." He sympathizes with new Directors who are told that current methods are sacrosanct.

Michael Jones has paid his dues in this industry. He has contributed substantially with ideas, concepts and marketing improvements. When he talks, I listen. But he is also a friend, and friends can talk plainly to one another. Besides, Michael owes me. I once found his lost golf ball on a Colorado golf course and saved him 2 penalty strokes. (Golfers take these things seriously.)

So, my response to Michael is, "Claptrap!" Advising new lottery people to immediately challenge current marketing tactics and strategies is academically interesting, but terribly unproductive. This is not the local poet's corner, Michael. It is a business, and a rather large one at that. The stakes are too high, time is precious and the risk is too great to indulge in philosophical challenges by neophytes still attempting to learn how to spell lottery.

Some years ago, a new Director was appointed to head a then successful lottery. She decided to immediately challenge the conventional wisdom espoused by her staff and her vendor. She conducted a personal research study by talking with six retailers. Based on her conclusive findings and vast (three weeks) lottery experience, she scrapped the current marketing plan and introduced a series of games with clever titles like *You Asked For It* and *People's Choice.*

These exciting games sold dozens of tickets. Instant sales for that lottery dropped into the proverbial toilet and have never totally recovered. That Director has long departed, but her legacy lives on. Once a market is lost, it is difficult, if not impossible, to recapture.

So, Michael, old pal, your concept of challenging current orthodoxies is interesting, but two bricks short of a full load. Orson Welles would have said, "It is a wine whose time should never come." Once the lottery newcomer learns the industry, challenge away. However, it is foolhardy to challenge something about which one knows so little. Wait six months or so, then discuss potential changes with the experts. It may not be as much fun, but it sells more tickets.

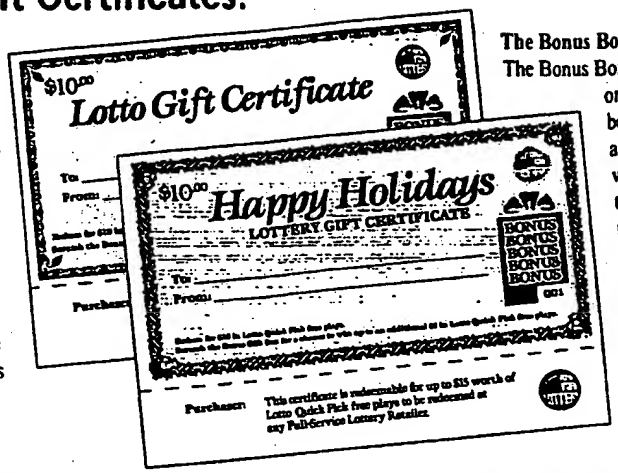
Jim Culver was formerly the SGI VP for Sales and Marketing. He retired in February, 1998 and now enjoys life on the water and golf course. He can be E-mailed at JRCulver@aol.com.

HOT OFF THE PRESS

New York Lottery Gift Certificates!

A great holiday gift! We've all witnessed the success of winter holiday scratch tickets – success due in large part to their appeal as gifts! Now, New Yorkers can give Lotto tickets as gifts via a "Happy Holidays" Lottery Gift Certificate! Gift recipients then have the choice of when to play Lotto (either immediately; when the jackpot gets bigger; or at some other time of their choosing).

Easy handling! Recipients redeem the certificate at any full-service lottery retailer. Retailers simply key in the PIN number, swipe the ticket, and the terminal automatically prints out a ticket for 10 Lotto Quick Pick plays – or more if the player wins the bonus.



The Bonus Box: A very clever win/win solution! The Bonus Box gives players a chance to win 2, 3, or 5 extra Lotto tickets. Retailers also benefit because players will have already revealed the PIN number when they scratch the bonus box, thereby relieving the retailer of this burden.

A great gift idea for anytime! The New York Lottery predicts great success for the gift certificates. That's why after the Happy Holiday certificates run out, they have a separate Lotto Gift Certificate ready for distribution and sale year-round.

Managing Editor
MATT GARVER
Editorial Staff
ELIZABETH KNIGHT
NANCY NEVINS
Circulation
LAURIE PUGH

Give us your INSIGHTS! You can contact us at
770·664·3700
FAX 770·343·8798
or visit us at www.scigames.com

SCIENTIFIC GAMES
INTERNATIONAL

1500 Bluegrass Lakes Parkway
Alpharetta, GA, USA 30004

EVIDENCE APPENDIX J

COPY OF MCCOLLOM ET AL. U.S. PUBLICATION NO. 2002/0010623

EVIDENCE APPENDIX K

COPY OF SMALL U.S. PATENT NO. 4,815,741

(x.) Related Proceedings Appendix

None.

This Page is Inserted by IFW Indexing and Scanning Operations and is not part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☐ BLACK BORDERS
- ☐ IMAGE CUT OFF AT TOP, BOTTOM OR SIDES
- ☑ FADED TEXT OR DRAWING
- ☑ BLURRED OR ILLEGIBLE TEXT OR DRAWING
- ☐ SKEWED/SLANTED IMAGES
- ☐ COLOR OR BLACK AND WHITE PHOTOGRAPHS
- ☐ GRAY SCALE DOCUMENTS
- ☐ LINES OR MARKS ON ORIGINAL DOCUMENT
- ☐ REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY
- ☐ OTHER: _____

IMAGES ARE BEST AVAILABLE COPY.
As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.